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ENVIRONMENTAL ASSESSMENT Commerce Industrial Chemicals, Inc. Feasibility Report for Hazardous Waste Storage and Incineration

Applicant: Commerce Industrial Chemicals, Inc. (WID980795181)

Title of Proposal: Feasibility Report for Hazardous Waste Storage and

Incineration Facilities

Location: County of Milwaukee

Township 8 North, Range 21 East, Section 26

City of Milwaukee

5611 West Woolworth Avenue

For further information on this project contact;

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PROJECT SUMMARY

Description, Purpose and Need

Commerce Industrial Chemicals, Inc. (CIC) is a chemical distribution company located in the northwest portion of the City of Milwaukee in Milwaukee County (see Attachments #1 and #2). The CIC facility located at 5611 West Woolworth Avenue consists of a brick and concrete block warehouse building of 45,000 square feet with an attached office area of 2,700 square feet. CIC distributes petroleum solvents, glycols, glycolethers, surfactants, color pigments, extender pigments, aluminum powders and pastes, steel cans, and steel and plastic pails. CIC has been in the chemical supply business for over 36 years and has been located at the West Woolworth location for over 12 years.

CIC stores hazardous wastes generated both on and off-site. CIC generates its own waste through the draining of returned drums, draining of hoses and wasning out of tank trucks. The remainder of the hazardous waste stored on-site comes from the company's customers who have purchased raw material from CIC, used it in their cleaning or manufacturing process, and returned it as a hazardous waste.

Whenever possible, hazardous wastes stored at CIC are reclaimed through solvent recovery operations conducted at off-site facilities. Wastes that cannot be reclaimed and would not be suitable for incineration at CIC (i.e , halogenated solvents) are shipped off-site for some other form of treatment or disposal. Other than one heat recovery boiler located at Hamilton Industries in Two Rivers, there are no other types of commercial incineration facilities in the CIC service area. The CIC service area has been described as being

from Green Bay south to the Wisconsin-Illinois border and from Milwaukee west to Madison. There are no hazardous waste land disposal sites in the CIC service area. Land disposal of hazardous waste (other than small quantities from small quantity generators) is not allowed in municipal sanitary lanafills.

CIC is seeking an operating license for both hazardous waste storage and treatment. Hazardous waste will be stored in drums and in the incinerator waste feedtank. Treatment will be by incineration. Under its current interim license application, CIC can store up to 40,000 gallons of waste and cannot use its incinerator.

Discussion of Storage Proposal

The storage proposal calls for storage of to 396-55 gallon drums and a 118 gallon liquid waste feedtank for a total storage capacity of 21,898 gallons of hazardous waste. This represents a reduction in storage capacity of 18,000 gallons from their interim license application. The following waste types and quantities are proposed to be stored at the facility. These waste classifications have been determined by CIC and are based upon waste characteristics and/or listing. The type classifications are used to segregate the wastes and determine if the waste is to be incinerated or sent off-site for reclamation. Further information on waste analysis is included later in this report. CIC proposes to incinerate only those wastes which cannot be reclaimed.

TABLE 1 WASTES PROPOSED FOR STORAGE AT CIC

Waste Type	Description	Quantity
Sm.	Ignitable waste (DOO1)	396,000 lbs/year
	Spent nonhalogenated solvents (F003)	88,000 lbs/year
Is	Ignitable hazardous waste with less than 100 ppm of Table VI, Chapter NR 181 Hazardous constituents (DOO1, FOO3)	Quantity included with type I waste
II	Spent nonhalogenated solvents (F005)	100,000 lbs/year
	Solvent washes (KO86)	100 lbs/year
III	Spent halogenated solvents	24,000 lus/year
	Total	608,100 lbs/year

Stored wastes will be handled according to whether they can be recycled or reclaimed at an off-site facility, whether they can be incinerated on-site, or whether they must be disposed of or treated at off-site facilities. Reclamation, recycling and treatment at off-site facilities may apply to all waste types. Only waste Types I, Is, and II would be incinerated at the facility. Drums containing waste Types I, Is, II, and III are all labeled and stored separately within the storage area. An operating log is maintained to keep track of the number and type of drums in storage.

The proposed hazardous waste storage area consists of a 65 foot by 22 foot storage area (1,430 square feet). This area is located on the inside east wall of the brick building about 40 feet south of the north wall (see Attachment #4). Warning and no smoking signs are posted on the doors to the storage area. This area is kept free of sources of ignition and open flames. All waste types in the storage area are compatible with each other. Wastes are separated by type to eliminate the possibility of incinerating incorrect waste material or sending incorrect waste material for recycling.

All waste containers in the storage area must be 55 gallon drums in good condition constructed of 18 gage steel and built to U.S. DOT 17E specifications. All drums must have sealed lids. None of the wastes stored in the drums are corrosive. Drum liners are not required. All drums are stored on pallets. This will keep the drums from coming in contact with liquid in the event of a waste spill. The maximum waste storage height is 3 drums. Adequate aisle space is maintained to allow for access and inspections. Weekly inspections will be conducted by CIC to check aisle space, stack height, sealing of drums, labels, pallets, floor, dike ramp and the sump.

An operating log indicating the date of shipment and the quantity of drums of each type will be maintained. This will allow CIC to keep a running balance on the number and type of drums in the storage area. This log will also indicate the dates for incineration or for shipment of hazardous waste to a different hazardous waste management facility.

A containment system will be constructed surrounding the hazardous waste storage area. It will consist of the concrete floor with a raised curb surrounding the storage area. This system will be capable of holding greater than 10% of the total volume of wastes stored in the system as required by state and federal standards. Also a sump will be built in the southeast corner of the storage area to serve as a collection point. There will be no discharge pipe from the sump. If any waste would accumulate in the sump, it will immediately be pumped into 55 gallon drums and stored until proper treatment, reclamation or disposal can be arranged.

The only tank involved in the waste storage operation is a 118 gallon hazardous waste incinerator feedtank. The feedtank serves to hold the waste fuel while the waste is being fed into the incinerator. This tank is an integral part of the incinerator. The feedtank and incinerator are

manufactured by the Kelly Company. The tank is constructed of 12 gage steel and has a wall thickness of .105 inches. The tank is filled one drum at a time using a manual transfer pump. An overflow return line will be connected from the tank to the drum to prevent overfilling.

To store wastes generated at its own facility for less than 90 days, CIC would not need a storage license provided all applicable hazardous waste generator requirements are met. To store wastes generated from off-site (throughout its service area), CIC must have a storage license. CIC provides this collection and storage service to its customers who have produced hazardous waste through the use of CIC chemical products. This service allows those companies to have their hazardous waste handled in a responsible, readily accessible manner which is reliable and environmentally sound. The collection of these wastes by CIC allows them to handle larger quantities (by off-site recycling, incineration, or off-site treatment) of wastes on a more economical scale while providing a necessary service to their customers. CIC provides a service to its customers in receiving, storing, and arranging for appropriate reclamation and/or treatment, for quantities of wastes which, if handled separately might not be economically reclaimed or environmentally treated.

Discussion of Incinerator Proposal

The proposed incinerator unit is a Kelly Company Model 380B incinerator with a Kelly Liquifier (TM) liquid waste injection system. The specific incinerator has been designed to burn 15 gallons + 10% per hour of hazardous waste. This is equivalent to about two drums of waste per operating day. CIC proposes to operate the unit 8 hours per day, 5 days per week and 52 weeks per year. This unit is equipped with modifications that will allow it to burn hazardous waste in compliance with performance standards of Chapter NR 181.45, Wisconsin Administrative Code.

The performance standards of NR 181 are as follows:

- 1. A minimum destruction and removal efficiency (DRE) of 99.99% for principle organic hazardous constituents (POHCs).
- 2. A maximum hydrogen chloride emission of 4 pounds per hour (Note: CIC will not incinerate any chlorinated wastes, therefore this emission standard does not apply in this case).
- A maximum particulate emission level of 0.08 grains per dry standard cubic foot corrected to 12% carbon dioxide.

CIC has demonstrated that the Kelly Model 380B Incinerator is capable of achieving these standards by submitting data in lieu of a trial burn (Attachment 5). A trial burn is an operational test performance of the incinerator to demonstrate that the incinerator is capable of complying with the previously mentioned performance standards. Submittal of data in lieu of a trial burn allows a facility to submit data from a similar incinerator unit

which has already had a successful trial burn conducted. Wastes to be incinerated must also be compared when a data in lieu of a trial burn is submitted. This information on the waste feed must be submitted along with the data from the trial burn.

The data submitted by CIC was for a trial burn conducted by the Midwest Research Institute (MRI) and the United State Environmental Protection Agency (EPA) in September of 1982 in North Carolina using a Kelly Model 380B Incinerator. The Kelly Company has certified this unit as identical to the CIC unit. This trial burn demonstrated the unit is capable of meeting the previously mentioned performance standards for the waste fed into it under specific operating conditions. CIC will operate the incinerator under these same conditions.

In comparing incinerator waste feeds the following must be considered:

- Heating value. The heat value of the proposed waste must be equal to or higher than that of previously incinerated waste.
- 2. Principle Organic Hazardous Constituents (POHCs). The proposed waste must not contain any POHCs considered more difficult to incinerate than those in the successful trial burn waste feed.
- Organic Chloride Content. The organically bound chloride content of the proposed waste must be equal to or lower than that of the previously incinerated waste feed.

The actual comparison of wastes to be incinerated at CIC with those used in the MRI/EPA trial burn shows that the heat value of CIC's wastes are higher and the CIC wastes have no POHCs which are considered more difficult to incinerate. The POHCs used in the MRI/EPA trial burn (run #4) were carbon tetrachloride, trichloroethylene, toluene and chlorobenzene. The heat value of the wastes are 0.24 kcal/gram, 1.74 kcal/gram, 10.14 kcal/gram and 6.60 kcal/gram, respectively. The trail burn demonstrated the ability or the unit to achieve the performance standard of greater than 99.99% destruction and removal efficiency for all POHCs up to carbon tetrachloride. Examples of POHCs which may be found in the proposed incinerator waste feed are methyl ethyl ketone, isobutyl alcohol, toluene and benzene. The heat value of these wastes are 8.07 kcal/gram, 8.62 kcal/gram, 10.14 kcal/gram and 10.03 kcal/gram, respectively. CIC will not burn any chlorinated wastes. Because no chlorinated wastes will be burned, there will be no hydrogen chloride emissions. In the event a hazardous waste operating license is issued for CIC, that license would include the specific operating conditions taken from the trial burn data as well as placing limitations on the waste feed.

All ash resulting from the incineration of hazardous waste at CIC will be managed as a hazardous waste. It will be properly labeled and stored in the hazardous waste storage area until a full drum has been collected. The entire drum will then be sent off-site for disposal. Ash resulting from the

incineration of a characteristic hazardous waste will be segregated from ash generated from the incineration of a listed waste. Ash resulting from the incineration of a listed hazardous waste will be disposed of at a hazardous waste landfill outside of Wisconsin. Ash generated from the incineration of a characteristic waste may be disposed of at an engineered licensed sanitary landfill. This ash would have to be tested prior to disposal to determine that it no longer exhibited any hazardous characteristics.

The DNR Bureau of Air Management has granted a permit to CIC to allow construction of the incinerator. This permit was public noticed and finally issued in May of 1982 (see Attachment #6). Because of the public concern over the emissions from the incinerator, the Bureau of Solid Waste has requested the Bureau of Air Management to compare the emissions from the incinerator stack to more common sources of air pollution such as automobile emissions and household furnace emissions. This comparison yielded the following results.

TABLE 2

COMPARISON OF AIR POLLUTANT EMISSIONS

(GRAMS PER HOUR)

AIR POLLUTANT	PROPOSED CIC INCINERATOR *	TYPICAL AUTOMOBILE **	GAS TANK FILL-UP ***	HOME FURNACE ****
Particulates	52	5	ма	1
Sulfur Oxides	Ó	3	BAN	29
Nitrogen Oxides	288	44	us.	7
Carbon Monoxide	35	488	→	2
Hydrocarbons	6	42	62	

- * Based on incinerator operation while burning 17 gallons per hour of waste solvent.
- ** Based on a 1980 passenger vehicle traveling 20 miles.
- *** Based on filling a 14 gallon vehicle fuel tank.
- **** Based on 100,000 BTU/HR furnace using #2 fuel oil.

The incinerator feed system will have an automatic waste feed cut-off system. This waste feed cut-off system will be tied into the main compustion chamber temperature, secondary combustion chamber temperature, waste feed rate, combustion gas velocity and carbon monoxide level in the stack. The waste feed cut-off system will be activated by high and low values for these parameters which would be established in their plan approval and license. Furthermore, CIC will continuously monitor the main combustion chamber temperature, the secondary combustion chamber temperature, waste feed rate combustion gas velocity and carbon monoxide level. Daily incinerator inspections and inspections of the monitoring equipment are required. These inspections will be conducted by CIC. The incinerator will be located in an area between the parking lot and the brick block building (see Attachment #4). A chain link fence will be constructed around the incinerator.

CIC will use a trained operator to run the incinerator. An independent professional engineer will certify the operator's qualifications once training has been completed.

Other Requirements

In addition to the previously mentioned concerns, there are numerous other requirements that the facility will have to adhere to. A general overview of these requirements is included below. The Department can upgrade these requirements by adding conditions to the plan approval and operating license. These include:

1. Waste Analysis Plan

CIC accepts wastes from facilities where clients have used a CIC product in generating a waste. CIC is familiar with the characteristics of the virgin product and the waste generation process. Prior to accepting waste, CIC first receives a waste sample and a completed waste sample profile report from the facility. Upon receipt of these items, CIC first reviews the waste sample report and segregates the waste according to the three waste types. These waste types are: Type I-ignitable wastes, Type II-ignitable nonhalogenated listed wastes with hazardous constituents, Type III-halogenated (specifically chlorinated) wastes.

The next step is to review the individual samples. To verify information on the waste profile report, samples are analyzed for organic constituents listed in Table VI of Chapter NR 181, Hazardous Waste Management, which are reasonably expected to be present. These constituents include: dichloromethane, tetrachloroethylene, trichlorethylene, lll trichlorethane, benzene, isobutyl alconol, methyl ethyl ketone, and toluene. There are roughly 360 hazardous constituents listed in Table VI of Chapter NR 181. Testing for every one of these constituents is not practical for CIC or most hazardous waste management facilities. Additional testing for classes of these constituents may be required in future submittals.

Type I waste will be tested for any Table VI constituents which could reasonably be expected to be present. A flash point determination on a representative composite of all drums in each shipment of Type I waste will be conducted. Once it has been determined there are no Table VI constituents present above the 100 ppm level, this waste will then be called Type Is and may be used as a starter material for the incinerator. The use of this waste, catagorized as hazardous soleydvetoits ingnitability, as a starter fuel will be reviewed further by the Department in the CIC plan of operation. The Department could require the use of a conventional fuel source as a starter. The starter fuel will allow CIC to bring the incinerator to the steady state operating conditions necessary to burn Type II wastes. If upon examination the waste has a greater than 100 ppm Table VI constituents, then it will be reclassified as a Type II waste.

If the analysis shows that the samples contain benzene, isobutyl alcohol, methyl ethyl ketone, or toluene, it is placed in Type II. If this Type II sample shows sufficient recovery value, the waste will be

stored for future reclamation. If not, the waste will be incinerated. Most of the waste received by CIC is expected to have sufficient recovery value for reclamation.

If the analysis shows samples containing dichloromethane, tetrachloroethylene, trichlorethylene, or lll trichlorethane, it is placed in Type III. If the sample shows sufficient recovery value, the waste will be stored for Future reclamation. The reclamation will take place at an off-site facility. If the sample shows insufficient recovery value the sample is rejected and the generator is alerted that he will have to find alternate means by which to dispose of this waste.

If the analysis shows the sample is a Type I or Type II which has some of the chlorinated constituents of Type III mixed in, the sample is rejected due to lack of incinerability and due to poor recovery value. The generator is then informed that CIC will not accept his waste and that he will have to use an alternate means of disposal. These wastes therefore will not be picked up by CIC.

The tests described above, for Table VI NR 181 constituents which could reasonably be expected to be present in the waste, will be performed on a representative composite of all drums of each presumed waste type in each shipment of hazardous waste from the same source. If analytical tests do not verify the initial determination, individual samples will then be required for analysis. Only those drums which meet CIC criteria will be picked up. All wastes stored at the site are picked up by CIC vehicles.

Prior to incineration, ten percent of all Type I waste will be analyzed for viscosity, ash content, chlorine content and higher heating value, using methods established by ASTM and/or U.S. EPA. Twenty percent of Type II waste will also be analyzed for the same parameters using the same referenced tests.

Trichloromonofluoromethane, tribromonethane, and dichlorodifluoromethane are not expected to be found in the wastes CIC receive. However, CIC will, on a spot basis, check for these materials at a frequency of approximately one in every 20 samples. If any of these three constituents are found at levels over 100 ppm, the sample will be rejected and the generator will be alerted that he will have to find alternate means by which to dispose of this waste.

The Department can require additional waste analysis information on such materials as heavy metals as a condition of plan approval and licensure if it appears these materials will be found in the waste feed.

Method of Analysis

All samples will be analyzed by methods listed in EPA Manual SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods; and American Society for Testing and Materials (ASTM) methods, ASTM-D240-761, ASTM-D808-812, or ASTM-D482-803. In performing these analytical techniques CIC will use a Perkin Elmer Sigma 3 gas chromatograph equipped with flame ionization detector, Sigma 10 Data Station, electron capture detector add on, and a purge and trap liquid sample concentrator. All procedures, sampling and handling and quality control will be performed in accordance to SW-846.

Waste Verification

When the waste itself is picked up, it will be taken to a reception section of the hazardous waste storage area until the initial determination can be performed. Once this has been conducted, the waste is assigned a spot in the storage area according to its type.

The tests described above for Table VI constituents which could reasonably be expected to be present in the waste will be performed on a representative composite of all drums for each presumed waste type in each shipment of hazardous waste from the same source. If analytical tests do not verify initial determination, the drums will be checked individually. The steel drums and their contents not matching the original sample will be returned to the generator.

Recordkeeping

Once the waste has been accepted and verified, the appropriate copies of the manifest are put together with the chromatograms, lab reports, and waste profile report. They are filed according to generator client, and kept in the operator record for a minimum of three years. The manifest number is recorded on the retained waste sample and the sample is kept for three years.

An operating log indicating the date of shipment and quantity of drums of each waste type will be maintained. The operating log also indicates the dates of incineration, or shipment to a different treatment, storage, disposal or reclamation facility. A running balance of each type of waste stored in the containment area will be maintained. The log will also indicate the dates of analytical verification and whether manifest discrepancies existed.

- 1 Standard Test for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter.
- 2 Test Method for Chlorine in New and Used Peroleum Products.
- 3 Test Method for Ash from Petroleum Products.

2. Security Requirements

The waste storage area is located inside of the brick block warehouse building. This building is equipped with an alarm system which senses either an intruder or a fire. This alarm is connected to a central security office which then notifies the police and/or fire department and the CIC emergency coordinator. A chain link fence with a barbed wire top will be constructed around the incinerator.

3. Inspection Requirements

The container storage area, the waste feed tank and incinerator all have inspection schedules. These inspections require specific areas to be checked in order to prevent any releases of hazardous waste due to equipment malfunction or structural deterioration. The incinerator and waste feed tank are inspected daily. The container storage area is inspected weekly. All inspections are recorded on the inspection log.

4. Contingency Plan Requirements

CIC does have a contingency plan. This plan is designed to minimize hazards to human health or the environment from fires, explosions, or releases of hazardous waste to air, soil or surface waters. This plan includes emergency coordinators, emergency equipment, an evacuation plan for the facility, and actions to follow in the event of fire or a waste spill. The plan also includes waste types at the facility, notification requirements in case of an emergency and actions to be taken following the emergency.

5. Personnel Training Requirements

Each CIC employee initially attends a hazardous materials and waste management training seminar. This seminar is a comprehensive and extensive overview of current regulations of EPA, DOT, and OSHA, for handling of hazardous materials, substances and waste.

Persons directly involved in the handling of hazardous wastes and materials are initially given a test to determine the extent of their knowledge of safe procedures and regulations. Areas of incorrect answers are then reviewed with the employee to insure safe handling of the materials in compliance with the regulations.

Emergency coordinators all take part in formulating the contingency plan. A meeting is held every six months to evaluate the plan's performance and communicate any necessary changes. Drills on the contingency plan are held to familiarize all personnel with the plan. Persons involved with any emergency equipment are trained in the use of that equipment.

The person operating an incinerator will receive training from the Paul Reilly Company, the distributer of the incinerator and the incinerator manufacturer, the Kelly Company. This will be done during shake down period at which time only Type I waste or fuel will be burned. The training will continue until the Paul Reilly Company and the incinerator manufacturer, Kelly Company, feel that the operator is competent in all aspects of its operation. After the training and shake down periods have been completed, an independent professional engineer will be contracted to give certification that the incinerator is being operated correctly.

6. Closure Plan and Bond

CIC has submitted a closure plan covering the actions necessary for closure of the facility at the end of its operating life. This plan includes removal of waste inventory, the decontamination of the storage area and incinerator, disposal of the decontamination wash water and closure certification by a professional engineer. In addition, a bond covering the cost of this closure is on file with the Department. The closure bond is updated annually.

7. Liability Insurance

CIC's existing liability insurance is presently being upgraded to cover the hazardous waste liability insurance requirements for sudden occurrences of the federal regulations (40 CFR164.147) and the requirements of Chapter NR 181. This liability coverage will be in the amount of one million dollars per occurrence and an annual aggregate amount of two million dollars. While this requirement has not yet been met, it must be completed prior to any final license issuance for the incinerator or the storage area.

Authorities and Approvals

This feasibility report is being reviewed under the requirements of Chapter NR 181, Wisconsin Administrative Code. This chapter covers hazardous waste management. Subchapters V and VI cover the standards for storage, treatment and disposal facilities and plan submittal and licensing. The statutory authority of Chapter NR 181 comes from sections 144.01(15), 144.43 through 144.47, 144.60 through 144.74, and 227.014, State Statutes. A portion of this proposal was also reviewed under Chapter NR 154, Wisconsin Administrative Code covering Air Pollution Control. A permit to construct the incinerator has been granted by the Bureau of Air Management (Attachment #6).

This Environmental Assessment has been written in accordance with Chapter NR 150. This chapter requires the review of licensure proposals for potential environmental impacts. The Bureau of Environmental Analysis and Review and the Department's Southeast District impact coordinator have reviewed and provided input on this assessment.

The United States Environmental Protection Agency (EPA) is currently reviewing CIC's hazardous waste storage and treatment permit application, has prepared a draft permit and held a public hearing for this facility. The EPA permit application was prepared and submitted in response to a Resource Conservation and Recovery Act (RCRA) Part B permit application call in. The application has been reviewed for the requirements included in Title 40 (Protection of Environment), Subchapter I (Solid Waste), Part 264 (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities), Subparts A, B, C, D, E, G, H, I, J, O and Part 270 (EPA Administered Permit Programs; The Hazardous Waste Permit Program). The permit application has been determined to be complete and technically adequate by EPA.

In accordance with state requirements, CIC contacted both the City and County of Milwaukee concerning this proposal. The City was notified of CIC's initial proposal to install an incinerator in a letter dated January 6, 1982. The City did not respond to that letter. On March 6, 1984 CIC notified the County and the City of its intention of obtaining a license for storing waste and requested information on any applicable local approvals. The County informed CIC that no permits or approvals were required. No action was taken by the City at that time (see correspondence in Attachment #7).

Commerce Industrial Chemicals is financing the cost of this project by itself. Plan review fees and license issuance fees for the facility will total approximately \$3,300.

PROPOSED PHYSICAL CHANGES

Manipulation of Terrestrial and Aquatic Resources

This project does not involve any landscaping or disruption of any surface drainage features. It is taking place entirely at an existing site. The storage area is indoors and the incinerator is on an existing concrete pad in the parking lot adjacent to the buildings. There is no proposed excavation involved at the site. There will be no changes to surface water drainage at that site.

Buildings, Treatment Units, Roads and Other Structures

The proposed physical changes as a result of this project are insignificant. The only additional work necessary at CIC is the construction of the secondary containment system around the hazardous waste storage area and the fence around the incinerator. Minor equipment modifications will have to be made to the incinerator. Incinerator installation began in 1982 and construction halted when CIC was informed it would have to apply for a hazardous waste incinerator license. The incinerator has never been used. A description of the existing buildings, hazardous waste storage area, feed tank and incinerator are included in the project summary. CIC may be installing a building to house the incinerator.

Emissions and Discharges

Information on emissions and discharges comes from two sources. These sources are the trial burn data by MRI/EPA and the Department's Bureau of Air Management new source construction permit. The trial burn data of run #4 was submitted to demonstrate the ability of the incinerator to achieve the performance standards of NR 181.45(4) and to establish conditions under which the incinerator must operate to ensure the standards are continuously met. The trial burn data establishes such conditions as minimum primary chamber combustion temperature, the minimum secondary chamber combustion temperature, combustion gas velocity, waste feed rate and carbon monoxide level in the stack gas. This was how the carbon monoxide range of 5.1 to 20 parts per million (included in the draft EPA permit) in the stack gas has been determined.

As discussed earlier, the waste used in the trial burn is not the same waste which will be burned at CIC. The waste CIC wants to incinerate is easier to burn than the waste used in the MRI/EPA trial burn and does not contain chlorinated compounds.

The review conducted by the Bureau of Air Management evaluated the incinerator's impact on air quality. This review included review of the incinerator, waste to be incinerated, applicable emissions limitations and an emission summary. The emission summary based on the incinerator burning Type O waste revealed the following:

TABLE 3

INCINERATOR EMISSION SUMMARY

Pollutant	Actual Emissions * Pounds per year	Projected Full Capacity Emissions ** Pounds per year
Particulate Matter	180 pounds per year	2,365 pounds per year
Sulfur Oxides	196 pounds per year	2,453 pounds per year
Nitrogen Oxides	1300 pounds per year	16, 469 pounds per year
Carbon Monoxide	Negligible emissions	Negligible emissions
Hydrocarbons	Negligible emissions	Negligible emissions

- * Actual Emissions are based on the burning of 125 pounds of waste per hour, 8 hours per day, 5 days per week, 52 weeks per year. CIC proposes to operate the incinerator in this manner. The hazardous waste operating license would limit CIC to operating the incinerator to this period.
- ** Projected Full Capacity Emissions are based on the burning of 375 pounds per hour (full capacity) for 24 hours per day, 7 days per week, 52 weeks per year. Even though CIC does not intend to operate at this level, all sources of air pollution must be evaluated for maximum potential emissions.

Note: Type O waste is a waste type commonly used in evaluating the potential emissions from air pollution sources such as incinerators. Type O Waste is defined as a mixture of highly combustible waste, primarily paper, cardboard, wood, boxes, and combustible floor sweepings; mixtures may contain up to 10% by volume of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags, and plastic or rubber scraps. This waste contains 10% moisture, 5% incombustible solids and has a heating value of 8500 B.T.U. per pound. This definition is based on Incinerator Institute of American Standards.

The preconstruction permit review states the purpose of the air quality review is to determine whether or not the allowable emissions from this proposed pyrolytic incineration system will cause or contribute to a violation of the particulates National Ambient Air Quality Standards (NAAQS). A screening analysis was performed using a U.S. EPA reference model.

The predicted maximum 24 hour concentration at stability 4 of 5 m/sec wind is 2.88 ug/m³ at .183 km. If the impact is less than 5 ug/m³, it is generally considered insignificant. The nearest particulate monitor is approximately 3.2 kilometers distance at 5100 North 91st Street. The second highest particulate concentration during 1980 recorded at this monitor was 105 ug/m³. If this concentration is indicative of the air quality near the proposed incinerator, the predicted impact should not jeopardize the 150 ug/m³ NAAQS.

As a result of the controversy surrounding the hazardous waste feasibility report, the Bureau of Air Management has again reviewed their preconstruction permit. It was concluded that the emission and impact of particulates, sulfur dioxide, nitrogen oxide, carbon monoxide and hydrocarbons will be less when the incinerator burns the proposed waste solvents than when it burns the "Type O" waste used to estimate emissions during the original review. The emission of unburned waste solvents or trace noncriteria pollutants (for which no national standards exist) were evaluated. They are not expected to be of concern because their emissions will be in trace amounts.

Waste analysis information in the feasibility report indicates the possible presence of heavy metals in certain wastes. These wastes include solvent still bottoms and Type II wastes from industrial uses where heavy metals may become entrained. Prior to license issuance or plan of operation approval CIC will be required to determine what concentrations of metals may be acceptable in its waste feed if CIC intends to burn wastes containing heavy metals. These concentrations will then be subject to review and approval by the Department. Also prior to license issuance, waste analysis procedures covering the frequency and method of sampling as well as the methods for analysis and for detecting and quantifying metals will be incorporated into CIC's waste analysis plan through conditions in their plan approval and operating license. In addition a change in the air pollution control permit for the incinerator may be necessary.

Attachments and Other Descriptive Materials Used in Preparing this Assessment

City of Milwaukee - Zoning Map and Legend Land Use Map and Legend

Commerce Industrial Chemicals - Feasibility Report - RCRA Part B Permit Application

Department of Natural Resources-Master Plan and Environmental Assessment for Havenwoods Forest Preserve

Department of Natural Resources-Bureau of Air Management Preconstruction Review and Preliminary Determination, and Air Pollution Control Construction Permit.

U.S. EPA RCRA Draft Permit on Hazardous Waste Storage and Incineration.

Attachments

1. Milwaukee County Map

2. City of Milwaukee Land Use Map and Legend

3. City of Milwaukee Zoning Map and Legend

4. CIC Location Map showing Incinerator, Feedtank and Storage Area

Trial Burn Data

Bureau of Air Management Permit

- 7. CIC Correspondence Concerning Local Approvals
- 8. Havenwoods Species List of Plants
- 9. Havenwoods Species List of Wildlife
- 10. Map of Havenwoods
- 11. University of Wisconsin Milwaukee, Department of Chemistry Comments

AFFECTED ENVIRONMENT

Much of the information included in this discussion on affected environment comes from the environmental assessment and master plan for the Havenwoods Forest Preserve and Nature Center. While the information was initially developed for the Havenwoods report, the close proximity of CIC to Havenwoods makes it useful and applicable for this report also.

The land area surrounding CIC has a wide range of uses. Review of a City of Milwaukee zoning map indicates the area is zoned industrial, local business and residential (Attachment #3). Review of the City of Milwaukee land use map shows the area's use as manufacturing, commercial, residential and recreational parks (Attachment #2). The DNR-operated Havenwoods Forest Preserve is located in close proximity to CIC. A map of Havenwoods is included as Attachment #10. The two properties are separated by about 500 feet. This buffer zone consists of the Cnicago Northwestern Railroad right-of-way and the Wisconsin Electric Power Company right-of-way (see Attachment #2).

Physical Environment

The CIC and Havenwoods areas range from relatively flat to gently rolling. There are few steep grades in the immediate area. The elevation of the CIC site is approximately 690 feet mean sea level. The area surrounding CIC, like all of southeastern Wisconsin felt the effects of continental glaciation that ended some 10,000 years ago. The area is covered with a thick mantle of ground moraine hundreds of feet thick. It is composed of clay, sand, gravel and stone that were carried by the continental glacier and deposited over the bedrock. The underlying bedrock is made up of Niagara dolomite. The dolomite or limestone formation is part of a large plate of limestone that covers the southern part of the Great Lakes. This ground moraine mantle is of great significance in Wisconsin in that it is a water bearing layer from which many farms and domestic water supplies are drawn. However, the City of Milwaukee draws its public water supply from Lake Michigan. Prior to consumption or distribution in the public water supply system this lake water is treated and disinfected. There are no municipal water supply wells within one mile of the CIC facility.

The soils in the area can be described as highly disturbed. This is due to the extent of development of rail and road corridors, commercial, manufacturing and industrial facilities and homes in the area. Even soils in the Havenwoods Preserve received a high level of disturbance as a result of

past land use. Areas of moderate disturbance to slight disturbance tend to occur at the perimeter of the Havenwoods area. These soils have some soil profile remaining. These soils have been reviewed and classified as silty clay loams.

There are two types of surface water resources in the CIC area. The first is Lincoln Creek which runs through the Havenwoods area. Lincoln Creek is the major water feature of this site and a tributary to the Milwaukee River. It is located in the northwest corner of Havenwoods and flows in a southernly direction through the Havenwoods property. It is a permanent water feature and has a variable flow rate. In low flow periods, usually in the late fall it has a flow of two cubic feet per second. During the spring runoff, flows can approach 36 cubic feet per second. The watershed for this creek lies directly north of the Havenwoods site and is a combination residential and industrial development.

The Lincoln Creek stream channel has been altered significantly. In the past, it was a broad basin with adjoining wetlands. Over the years, landfill and other land uses have caused the stream to be channelized or otherwise made straight. A corridor of vegetation consisting of shrubs and small trees has developed along the stream. The stream because of its wide levels of flow, experiences scouring on an annual basis. This diminishes the potential for permanent aquatic life in the stream. Fecal coliform counts exceed safe limits during high flows. During this time Lincoln Creek is not suitable for body contact such as recreational swimming. During periods of low flow, the stream would be considered for partial body contact such as biological sampling. It is anticipated that as pollution abatement efforts continue the water quality of the creek will improve.

A 3-4 acre pond with a maximum depth of 4 feet has been constructed at Havenwoods (see Attachment #10). The pond has a variable level and the surface runoff is from just the interior of the property. Attachment #10 also shows wetlands located in the Havenwoods area.

The second water resource of the area is surface drainage. In general, surface drainage in the area is collected in storm sewers which eventually discharge to Lake Michigan or the Milwaukee River or one of its tributaries.

The CIC area is located in an attainment area for particulates, sulfur dioxide, nitrogen oxides, carbon monoxide and lead, and a nonattainment area for ozone. A nonattainment area is an area which has not yet attained the national ambient air quality standards for a given pollutant. In this case, that pollutant is ozone. A nonattainment area for particulate emissions exists about 4.2 miles away.

Biological Environment

Flora

The natural vegetation in the area has been disturbed by commercial, industrial, manufacturing and residential development as well as rail and road development. Present vegetation in the residential areas as well as in the

light manufacturing and commercial areas consists of numerous residential type grasses, shrubs, flowers and trees. Examples of common flora include grasses such as mixtures of merion grass, kentucky blue grass, rye grass and fescues grasses, (clover, while being a weed, is found in most lawns); shrubs such as (deciduous) dogwood, honeysuckle, (evergreens) junipers and arbor vitae; flowers such as (annual) marigold, zinnia and petunias and (perennials) tulips, peonia and phlox and rose bushes; trees such as norway spruce, maple, ash, oak and clump birch. Flora found in the industrial areas are likely to be characterized by dominant pioneer invading plant species such as clover, foxtail and ragweed. Desirable plant species are not likely to be found in these industrial areas. The greatest quantity and variety of flora in the area is likely to be found at the Havenwoods Forest Preserve. While past land use (prior to establishment of the preserve) did highly disturb the area, Havenwoods has been in the process of revegetating itself as evidenced by the number of trees, shrubs, and herbaceous plants that are found at the site. An extensive planting program has assisted in this effort. A listing of trees, shrubs and herbaceous plants and grasses that are present at Havenwoods are included in Attachment #8.

Fauna

Animals likely to be found in the residential area include common domestic pets as well as common urban wildlife. Examples of domestic pets would be dogs and cats. Examples of common urban wildlife would be small animals such as squirrels, rodents, raccoons along with birds such as sparrows, robins, pigeons and numerous more. These animals may likely be found in the commercial, manufacturing and industrial areas also.

As with the flora, Havenwoods is home to many of the wildlife species in the area. The most common species to be seen are ring-necked pheasants, woodchuck, cottontail rabbits, ground squirrels, thrushes, finches and warblers. In addition to the resident population of wildlife, the site is of sufficient size to attract migrating wildlife. These are often such species as red-tailed hawk, sparrow hawk, wood hawk, warblers, mallard, teal, and some wading birds. The wildlife species list compiled by the Friends of Havenwoods can be found in Attachment #9. This list represents a good cross-section of what is readily visible on the Havenwoods site.

Social/Economic

The area surrounding CIC is a mix of residential, commercial and industrial development. This is consistent with the zoning and land use maps acquired from the City of Milwaukee (see Attachments #2 and #3). The residential neighborhood is located to the north and to a lesser degree to the east of the CIC facility. Many of these homes in the surrounding neighborhoods were constructed in or around the mid-1950's. The nearest residence to the CIC property is about 400 feet. These areas, according to the Havenwoods Environmental Assessment, are of mixed racial composition and in general consist of middle class neighborhoods.

The area to the east, west, and south of CIC is zoned industrial. The area surrounding the CIC property contains several industries including Simplicity, Acme Printing, Paper Form Company and Century Hardware.

Two railroad corridors intersect adjacent to the CIC property. These are the Chicago Northwestern and Wisconsin Southern Railroad right-of-ways. The right-of-way used by the Wisconsin Southern is owned by the Wisconsin Department of Transportation and leased to Wisconsin Southern. Both of these rail corridors are currently subject to frequent rail use. Across the rail corridor to the south is the Havenwoods Forest Preserve and Nature Center.

Special Resources

The edge of the Havenwoods Forest Preserve and Nature Center is located about 500 feet from the CIC property line. Havenwoods is a state forest consisting of 237 acres of open grassland and scattered trees. The major focus of Havenwoods is as an urban environmental awareness program and nature oriented recreation. This includes an environmental awareness center building, special events area, hiking trails, wetlands basins, entrance road and parking. Past land use of the Havenwoods area include use as a county house of correction and prison farm, a U.S. Army disciplinary barracks and a Nike missile site. From 1958 to 1970 the 50 acres west of Lincoln Creek were used as a landfill by Milwaukee County.

In 1978, then Governor Schreiber recommended that the City of Milwaukee and the Federal General Services Administration transfer the land to the Department of Natural Resources for development and establishment of a nature and wildlife preserve in an urban area. In fall of 1979 the Secretary of the Department of Natural Resources established an ad hoc advisory committee to assist the Department in development of a master plan for the property. The master plan was completed in April of 1981 and outlines how the Department will develop and manage the property. Recommendations of the master plan have been carried out since then.

The Bureau of Endangered Resources was contacted and no threatened or endangered animal or endangered plant species are located in the CIC area or in the Havenwoods Nature Preserve. A plant listed on the states threatened species list, wild quinine, was transplanted into Havenwoods from the Department's Wilson Nursery last year.

ENVIRONMENTAL CONSEQUENCES

<u>Physical</u>

Physical changes to the area as a result of the project will be minimal. There will be no changes to the topography or surface drainage patterns of the area as a result of this project. This project will result in a reduction in the amount of 18,000 gallons of hazardous waste that CIC will be storing at

the site. The waste will be stored at the site in 55 gallon drums on pallets on a concrete pad with a secondary containment system inside the block warehouse building. The storage area will be inspected weekly. This minimizes the possibility of the waste escaping into the soil or groundwater in the surrounding environment. The discharge plume from the incinerator will be a physical change. This plume will discharge from the incinerator stack at a height of 27 feet and of an estimated temperature of 400°F. This plume will quickly disperse. The National Ambient Air Quality Standards will not be jeopardized by operation of the incinerator. The incinerator system will include a air to air heat recovery system. This system will be used to heat the CIC warehouse. The incinerator and waste feedtank are inspected daily.

Any increase in traffic in the area will be minimal. CIC only picks up waste from its customers who are purchasing chemical products from them. Waste is picked up only when a chemical product is delivered. Therefore the only increase in truck traffic would result from increased product business and of those trucks returning to CIC.

The incinerator is located adjacent to the concrete block building and will be enclosed by a chain link fence. Aesthetically, the incinerator and fence will not be inconsistent with the concrete block warehouse building and other buildings in the immediate industrial area. CIC is considering constructing a small building to enclose the incinerator.

While CIC will have three waste types in its storage area, it will only be able to incinerate Type I and Type II wastes. These are basically ignitable wastes and listed non halogenated solvents. CIC will not be able to incinerate Type III wastes, which are listed halogenated (more specifically chlorinated) solvents. The likelihood of CIC accidentally incinerating a barrel of Type III waste is remote. The reasons for this are numerous. First of all, the precautions exercised in the waste analysis plan preclude the possibility of Type III chlorinated wastes becoming mixed with either Type I or Type II wastes. All drums are sampled prior to incineration. Also drums containing the three waste types are physically separated in the storage area. Drums to be incinerated are placed in a separate designated area. Also an operating log is maintained which keeps track of the number and type of drums. This log will also indicate dates for waste incineration and dates the waste is shipped off-site. Other items that would prevent CIC from incinerating chlorinated wastes are the value of the wastes to the solvent reclamation business and the potential for damage to the incinerators heat recovery unit by hydrogen chloride emissions.

CIC, presently and will in the future, continue to ship its Type III waste chlorinated solvents off-site for solvent reclamation. Chlorinated solvents can be reclaimed by distillation, then sold and used again. CIC presently works with a solvent reclamation company in Rockford, Illinois. Solvent reclamation is an economically viable business practice and several Wisconsin businesses including Milwaukee Solvents and Chemicals, Hydrite Chemical

Company and Waste Research and Reclamation have businesses of this type. CIC no longer receives still bottoms back from the solvent reclamation company it is working with and has removed the still bottoms that it once stored on-site.

For the reasons given above, the likelihood of chlorinated wastes being incinerated is remote. If incineration of these wastes were to occur, the following may happen. Chlorinated solvents have a lower BTU value (heat value) than the non-halogenated solvents to be incinerated. Any waste feed with chlorinated solvents would therefore have a reduced BTU value. A reduced waste feed heat value could result in a reduction in the primary combustion chamber temperature and result in activation of the waste feed cut-off system. Once this system is activated, waste can no longer be fed into the incinerator. The cut-off system will be inspected daily.

In the event the waste feed heat reduction was not significant enough to cause activation of the waste feed cut-off system, the incinerator would continue to operate under the conditions of its plan approval and operating license. These conditions reflect the operating conditions of the trial burn. The trial burn data did demonstrate the ability of this incinerator model to adequately destroy chlorinated wastes with low BTU values sucn as carbontetrachloride and chlorobenzene (CIC does not intend to incinerate these wastes). As a result of this, it is likely chlorinated wastes would also be significantly destroyed (99.99% DRE) because of these operating conditions.

The CIC facility is subject to inspections by the City of Milwaukee Building Inspection and Safety Department. The city is responsible for ensuring the requirements of Chapter IND8, Wisconsin Administrative Code are met. Chapter IND8 covers the regulations governing flammable and combustible liquid storage. A recent inspection of the storage area by the city has resulted in the recommendation that the fire prevention system be upgraded. Presently CIC has a sprinkler system located in the storage area. A fire extinguisher is located just outside the door to the storage area. No smoking is allowed in the storage area. The area is kept free of sparks and other sources of ignition. CIC does have equipment on-site for cleaning up any spills of hazardous waste.

Both the Police and Fire Departments have been notified of CIC's hazardous waste activity and given copies of their contingency plans. The Fire Department has visited the facility. The contingency plan is an action plan for the facility to follow in the event of a fire or spill.

The spill of a waste from a drum is not a likely occurrence. The drum storage area is inspected at least weekly and drums are stored in such a manner to allow for inspection without moving the drums. The waste is stored in U.S. DOT specified (DOT 17E specifications) containers. Included in these inspections are a check of the drum storage container area, drum inventory and emergency equipment. If a drum is found leaking as a result of these inspections then the waste is transferred to a different drum. Any spilled waste is immediately cleaned up.

A waste spill in the warehouse will be handled by using absorbent material to contain the waste. The material would then be collected in drums, labeled and stored on the hazardous waste storage area. A spill in the storage area would accumulate in the secondary containment system and in the sump. From the sump the waste will be transferred to drums and stored in the hazardous waste storage area.

Biological

Impacts placed on the biological environment will be minimal. As mentioned previously, the hazardous waste is stored on-site in such a manner as to make the possibility of any discharge to the surrounding environment minimal.

The incinerator has been tested and shown to have a destruction removal efficiency greater than 99.9% (e.g., if wastes having a contaminant concentration of 10,000 ppm are fed into the incinerator, less than 1 ppm will be in the emission). This test was conducted on hazardous waste constituents more difficult to destroy than the hazardous waste constituents to be burned at CIC. Actual emissions from the incinerator may consist of a maximum of 180 pounds per year particulate matter, 196 pounds per year of sulfur oxides; and 1300 pounds per year of nitrogen oxides. Hydrocarbon and carbon monoxide emissions will be negligible. The impact of these emissions were reviewed by the Bureau of Air Management. The National Ambient Air Quality Standards will not be jeopardized or exceeded by the incinerator emissions.

Ash generated through incineration will be stored on-site in 55 gallon drums and be handled as hazardous waste until a determination is made as to whether it is hazardous or not. Ash generated from the incineration of listed waste is a hazardous waste. Ash generated from a characteristic hazardous waste is classified as hazardous until it has been tested and shown that it no longer exhibits any hazardous characteristics. Hazardous waste ash will be disposed of at a hazardous waste landfill outside Wisconsin. Nonhazardous waste ash will be disposed of at a licensed engineered sanitary landfill.

There is not expected to be any increase in noise from the incineration operation. The facility does not produce any industrial wastewater or process discharge water. Therefore, there will be no impacts to aquatic life. Due to precautions previously mentioned, no impacts to groundwater and soil are expected.

Social/Economic

By storing hazardous waste, CIC provides a service to clients who have produced hazardous waste through the use of a CIC supplied chemical. This service allows those companies to have their hazardous waste handled in a responsible, readily accessible manner which is reliable and environmentally sound. Hazardous waste stored at CIC are reclaimed through solvent recovery operations conducted at an off-site facility. Waste that cannot be reclaimed and would not be suitable for incineration at CIC (e.g.; halogenated -

specifically chlorinated-solvents) are shipped off-site for reclamation or treatment. No reclamation, or treatment other than incineration of non-halogenated wastes will occur at CIC. The collection of wastes by CIC allows them to handle larger quantities (by off-site recycling, incineration, off-site treatment) of wastes on a more economical scale while providing a necessary service to their customers. If CIC did not provide this service and wastes were handled separately, then the wastes generated by their customers might not be environmentally treated or reclaimed. CIC provides this service to small generators that may have trouble dealing with high volume hazardous waste handlers that may ignore or not consider some of the problems of smaller generators.

CIC has occupied this site of its existing facilities for the past 12 years. They have been storing hazardous waste on-site for much of this time. Completion of construction and operation of the incinerator is the only new part of this proposal. While the City of Milwaukee was notified at least twice of the project, they provided no comments on city regulations until after an EPA public hearing on November 1, 1984. During the time CIC has occupied the facility there have been no apparent operating problems. The city has been conducting inspections at the facility since at least 1979. This seems to indicate that facilities of this type can exist in areas zoned for industry adjacent to residential neighborhoods with no apparent impacts on the area.

Regulations of hazardous waste storage, treatment, disposal and generation provide for the protection for public health, safety and the environment. Past problems associated with improper management of hazardous waste have created new regulations since 1980-81. In or around Milwaukee County there are numerous, over 30, hazardous waste storage and/or treatment facilities. These facilities are located in Brookfield, Mequon, Menomonee Falls, Wauwatosa, Glendale, New Berlin, West Milwaukee, Oak Creek, South Milwaukee, West Allis, and Cudahy as well as at 18 various sites throughout the City of Milwaukee. There are over 190 generators and 150 small quantity generators of hazardous waste in Milwaukee County based on a review of the manifest usage records and annual report submittals by the Systems Management Section of the Bureau of Solid Waste. In addition, there are 40 licensed hazardous waste transporters located in Milwaukee County of which 28 are located in the City of Milwaukee. This does not account for the numerous loads of hazardous virgin material or product which is handled by Milwaukee area businesses. These businesses range from gas stations and dry cleaners to chemical manufacturing firms.

This information indicates that it is very likely that hazardous waste or material is generated, stored or treated at many of the industrial parks throughout the City and County of Milwaukee. In light of this, the potential economic impact of living in a residential neighborhood adjacent to an industrial park or an area zoned industrial is not peculiar to the neighborhoods surrounding CIC. This may be an issue for many neighborhoods throughout the city. How the city wishes to deal with this and the issue of

potentially reduced property value and the resulting impact on tax base and local economy is a local issue for the city to deal with. It seems unlikely that the city would want to relocate all companies handling hazardous materials or wastes out of industrial parks near residential areas.

Milwaukee does have an economy based on a highly mechanized industry which generates hazardous waste and also employs many people living in the city. Placing further requirements, in addition to stringent RCRA and Chapter NR 181 regulations, on industries may result in the industries considering relocation outside the City of Milwaukee and perhaps outside the State of Wisconsin. If this were to occur, it potentially could result in loss of jobs and income to people living in the City of Milwaukee and the State.

Special Resources

The impact to this project on the Havenwoods Forest Preserve is expected to be minimal. The hazardous waste storage area will not impact Havenwoods at all. Emissions from the incinerator are not significant and any impact from the emissions would be minimal.

No threatened or endangered animal or endangered plant species will be impacted by this project. Wild quinine, a plant on the state's threatened plant species list, has recently been transplanted to the Havenwoods area. This project will not impact that plant.

Adverse Impacts That Cannot Be Avoided

Adverse impacts resulting from this project include discharge of small quantities of particulate emissions and sulfur and nitrogen emissions from the incinerator. The impacts of these will be minimal. Performance data submitted as part of a feasibility report indicates the incinerator can achieve the performance standards of section NR 181.45 requiring greater than 99.99% destruction removal efficiency and for particulate matter emissions. Chlorinated solvents will not be incinerated, thereby eliminating any hydrogen chloride emissions and the applicability of the hydrogen chloride standard. Carbon monoxide and hydrocarbon emissions will not be significant. National Ambient Air Quality Standards will not be exceeded as a result of this project.

The potential exists for some heavy metals to be present in the waste feed. If CIC intends to burn wastes containing heavy metals, then a determination will be made on what concentrations are acceptable and would result in only insignificant impacts or minimal risk to the environment. A change to CIC Air Permit may be necessary in this event.

Truck traffic is tied directly to product sales rather than hazardous waste pickup. Waste is only picked up when a product chemical or supply is delivered. Therefore truck traffic would increase only if product sales increase.

Alternatives

- 1. No Action Alternative. This alternative would allow CIC to continue to store up to 40,000 gallons of hazardous waste at the site under its interim status and continue to manage its waste as it does now. Currently CIC separates wastes for off-site reclamation or off-site treatment or disposal. This alternative would not allow CIC to complete construction of or operate its incinerator. All waste that would be capable of being treated in the CIC incinerator would have to be shipped off-site to a different incinerator or for an alternate method of treatment. The waste could be stored on-site for an indefinite period of time or until CIC reached their interim storage limit of 40,000 gallons. However, this option is not available because it is not consistent with state regulations requiring a hazardous waste facility to get a hazardous waste operating license.
- 2. Disposal of Liquid Wastes in Landfills. This is not a feasible alternative. In Wisconsin disposal of ignitable waste in landfills is prohibited under NR 181.44(10)(c). Disposal of noncontainerized liquid waste is prohibited under NR 181.44(10)(e). Presently there are no hazardous waste landfills in Wisconsin. The RCRA amendments of November, 1984 prevent the disposal of bulk liquid hazardous waste in landfills after May 8, 1985. This will eliminate the ability of Wisconsin generators, who may use CIC, from disposing of liquid hazardous waste in out of state landfills. This is not an environmentally sound alternative.
- 3. Off-Site Incineration. Ignitable wastes could be transported to an existing hazardous waste incinerator located in the midwest. This would result in increased costs due to transportation and small volumes. In this situation, CIC may not wish to accept waste from off-site because it would have to pay those increased costs and might not be able to recover the costs through the shipping of greater volumes. The generators of the wastes would then have to find an incinerator and pay transportation and burning costs, increasing their costs. In some cases, this option may not be realistic for small generators, and could create incentive for mismanagement of waste.
- 4. Off-Site Reclamation and Off-Site Treatment of Waste. CIC presently evaluates all waste upon receipt to see if it is suitable for reclamation. If the waste can be reclaimed, then it is sent off-site for that purpose. If it cannot be reclaimed, then it is evaluated for incineration or off-site treatment or not accepted. If wastes are found to contain any chlorinated solvents they are shipped off-site for reclamation or they are not accepted. Reclamation does not solve the problem of waste disposal. Reclamation itself generates wastes such as still bottoms from solvent recovery. This waste may be of a lesser quantity than the original solvent wastes but is in a more concentrated form. This alternative still results in wastes which must be disposed of. CIC will not accept wastes that will have to be taken to an off-site

disposal facility. Wastes for which incineration is the best available form of technology for treatment may have low recovery value and may not be acceptable to a reclamation facility. If these wastes are added to a recyclable load of waste, the incineratable waste can decrease the value of the total shipment to the reclamation facility and could result in rejection of the shipment by the reclamation facility.

- Waste Exchange. A waste exchange is based on the idea that one industry's waste material may be a product material for another. Most waste exchanges are informational clearinghouses and are oriented towards large waste quantities. They provide information about specific wastes available and companies interested in using the wastes as a raw material are put in contact with the waste generators. Waste exchanges are a means of fostering resource recovery and conservation. The clearinghouse basically serves as an informational source for generators and manufacturers. CIC is not a waste exchange clearinghouse. It is doubtful that anyone would be able to use the particular wastes that CIC would incinerate, except as a fuel source. CIC is proposing to do this during the winter by recovering the energy from this waste through utilization of a heat recovery system.
- 6. Alternative Sites. The site at which CIC is proposing this project is at its commercial facility. If CIC was required to go to an alternative site it may not proceed with the project. Also going to a separate site would require CIC to begin their feasibility report and RCRA permitting processes over. It is unlikely that wherever a new CIC facility was sited or any other hazardous waste facility located, stiff opposition could develop.

The Department would not allow CIC to obtain a state license if it would have an adverse impact on the environment or human health, regardless to the proximity to residential areas.

7. Alternative Size. The proposed size of the storage area represents a reduction of roughly 18,000 gallons from the interim license status authority of 40,000 gallons. CIC expects to operate with less waste stored than is being requested in their storage proposal. CIC has sized the incinerator on the basis of what they feel is necessary. The incinerator is a relatively small unit. It is the smallest unit Kelly Company manufacturers for this purpose. The burning capacity will be 15 + 10% gallons per hour. The unit will operate at a minimum 8 hours per day, 5 days per week, 52 weeks per year for a maximum annual incineration capacity of 34,320 gallons per year. This will account for the burning of about 2 drums of waste per day. Increasing size of the incinerator is not necessary, decreasing the size may prevent CIC from being able to economically operate the unit.

EVALUATION

Secondary Effects. As a result of this action, is it likely that other events or actions will happen that will significantly effect the environment?

No secondary effects are likely as a result of this action. Hazardous waste will be stored at the CIC facility as it has been in the past. Any increase in truck traffic will be minimal. Emissions from the incinerator will not be significant. The Department does not believe that the emissions from the incinerator should pose any environmental or human health risk. By being diluted in the atmosphere after leaving the stack, the emissions will travel in the prevailing wind direction at the time of discharge. While the meteorological characteristics near the site cannot be forecasted with any great accuracy, a wind rose diagram supplied by CIC in their feasibility report indicates that the wind direction is generally out of the west-by-northwest to south region, toward the east-by-southeast to north region.

As addressed earlier, incineration of a Type III waste will be prohibited and is very unlikely due to CIC's testing, and labeling inspections, and other waste management practices. In the event that a Type III waste would be inadvertently fed into the incinerator, the impacts would not be significant. The waste feed cut off system will handle problems dealing with combustion temperatures, gas velocity, waste feed rate and carbon monoxide level. If heat value of a Type III were sufficient, then destruction of hazardous constituents would be adequate to minimize any impacts to the environment.

Spills of hazardous waste from the storage area would have minimal impacts. Spills from containers in the storage area are unlikely due to weekly inspections of the area. In the event there is a spill in the storage area it will accumulate in the secondary containment system and be pumped from the sump into drums and stored, labeled and properly managed in the hazardous waste storage area. Spills outside the storage area will be handled by the use of absorbent material applied to the spilled waste. This waste would then be stored, labeled and properly managed in the hazardous waste storage area.

The risks imposed by CIC through continued operation of its facility will be minimized by adherence to the terms of its RCRA permit and plan approval conditions and operating license issued by the state. The question of whether a catastrophic "worst case" event would happen is not subject to scientific scrutiny. The question of how great the magnitude of a hypothetical "worst case" event would be is one that could only be answered only on highly conjectural grounds. However, the Department believes proper management of hazardous waste can significantly reduce the likelihood of even minor releases. The grounds for issuing a license will be based on CIC's agreement to maintain good management practices and the conditions of the plan approval. Concerns regarding property value are a city and local issue in this case as well as in the case of any residential neighborhood adjacent to an industrial area.

New Environmental Effect. Does the action alter the environment so that a new physical, biological or socio-economic environment would exist?

The proposed action will not result in any significant changes to the physical, biological or socio-economic environment of the area. The hazardous

waste storage facility will continue to operate much as it has in the past only with less waste stored on site. Truck traffic is tied to sales of commercial products by CIC, not waste management activities. Waste is picked up from a generator when a CIC product is delivered. The incinerator has been reviewed for compliance with performance standards by the Hazardous Waste Management Section of the Bureau of Solid Waste and for air emission impacts by the Bureau of Air Management. These reviews have shown the incinerator is capable of meeting the performance standards of a hazardous waste incinerator and the emissions from the incinerator will not jeopardize the National Ambient Air Quality Standards of the area.

Increased noise caused by incineration operation is not likely to occur, and if it does it is not likely to be noticeable. Given the location of the CIC facility adjacent to the intersection of two active rail lines as well as a major street and being in an area zoned industrial, it is not likely an increase in the noise level will be noticeable.

CIC does not have any process wastewater. Therefore, there are not any process connections to either the storm or sanitary sewers. Both the feedtank and the container storage area have secondary containment systems that would prevent any spills of hazardous waste from escaping to the environment. In addition, the feedtank is inspected daily and the container storage system is inspected weekly. The incinerator is inspected daily. In addition CIC has developed a contingency plan to cover what actions to take in the event of a spill or fire.

The subject of property value is a local issue. Milwaukee is a city with a strong industrial base. Considering this and the large number of hazardous waste generators, treatment and storage facilities in the Milwaukee area, the likelihood of a hazardous waste facility, not to mention facilities that store and use hazardous materials, being located in a industrial area adjacent to a residential neighborhood is high. This is an issue for the City of Milwaukee and Milwaukee County to address.

Geographically Scarce. Are the existing environmental features that would be affected by the proposed actions scarce, either locally or statewide?

Any impacts on existing environmental features are expected to be insignificant. Havenwoods Forest Preserve is a state run forest located nearby. There are no other Department-operated parks in Milwaukee. The Olympic speed skating rink is leased to the Olympic Ice Rink Operating Corporation.

Milwaukee County does operate a public park system.

Precedent. Does the action and its affects require a decision that would influence future decisions?

No, each feasibility report is written for a specific hazardous waste facility and reviewed independently against the state's procedures and codes for

licensure of hazardous waste facilities. CIC is among the first group of facilities that are going through the State's hazardous waste licensing process. They are not alone and are not the furthest along in this process. Other facilities located in Waukesha County, Marathon County and Langlade County are also going through the licensing process. A hazardous waste license covers a two (2) year period and must be renewed by the applicant (CIC) every two (2) years. Any necessary modifications can be made at the time of reissuance. If a facility operates in substantial noncompliance then the Department can revoke the facility's operating license.

A license duration term cannot exceed ten years from the date of the initial operating license. If the facility chooses to continue to operate after the duration term ends, then the facility owner must submit all the plans and reports necessary for a new operating license.

Facilities which recycle hazardous waste are eligible for exemptions from the hazardous waste licensing process. Recycling of waste includes the burning of waste with a high BTU value (greater than 5,000 BTU/pound) to recover the wastes energy potential. There are facilities in the Milwaukee area operating incinerators with heat recovery units or industrial boilers that utilize hazardous waste as fuel which have license exemptions. These facilities include Continental Can Corporation and Briggs and Stratton. These facilities are eligible for exemptions because they only burn their own waste.

CIC is also presently undergoing the federal permitting process to obtain a RCRA permit to operate a hazardous waste storage and treatment facility. This permitting process is substantially complete. The completeness and technical adequacy determinations have been made supporting the permit application. A draft permit and fact sheet have been prepared, a public notice filed and a public hearing has been held. EPA must respond to the public comments in a responsiveness summary before a final RCRA permit can be issued. Also, the RCRA amendments of 1984 require that CIC provide information on any past action at the site which may require a corrective action. A RCRA permit covers a period of ten (10) years.

CIC is not the first facility in Wisconsin to go through the RCRA permitting process. Final EPA RCRA permits have been issued for five facilities in Wisconsin. Draft permits have been prepared for an additional 12 facilities. CIC is considered a major hazardous waste facility because of its incinerator. All incineration and land disposal facilities are categorized as majors by EPA definition, regardless of size. The CIC incinerator is a small incinerator unit.

<u>Controversy</u>. Discuss and describe concerns which indicate a serious <u>controversy</u> or unresolved conflict concerning alternative uses of available resources.

Two public meetings were held by the Department as a result of the feasibility report submittal. On Monday evening, January 7, 1985 a public meeting was held to allow residents to comment and provide information of the feasibility

report. A public hearing was held on Thursday, January 10, 1985 to allow for the public to comment on the Department's determination of feasibility report completeness. Many people from the area near CIC voiced their concerns about the proposal at the January 7 public meeting. At the January 10 public hearing similar concerns were raised. CIC defended its proposal at this hearing by responding to questions directed to them.

Numerous individuals and neighborhood groups, such as Friends of Havenwoods and the Northwest Community Alliance, along with the City of Milwaukee nave expressed their opposition to this project. They have expressed concern in the following areas.

- Location of the facility next to a residential area and a recreational area,
- Safety adequacy. From both the incinerator emissions and storage of ignitable wastes,
- 3. Declining property value because of a hazardous waste facility,
- 4. Traffic and noise,
- 5. Impacts to the environment, and
- 6. Land use and zoning permits.

These issues have been addressed throughout this assessment.

Several business groups and businesses including the Federation of Environmental Technologists, Briggs and Stratton Corporation, Wisconsin Gasket and Manufacturing Company, Kass Tool and Die, Great Lakes Instruments, and Print Works have expressed support of the proposal by CIC.

At the request of State Senator Barbara Ulichny, James McFarland, Professor and Chairman of the Department of Chemistry at the University of Wisconsin-Milwaukee coordinated an independent review of the CIC proposal. A copy of his comments on the proposal is included as Attachment #11.

Presently, CIC and the city are involved in litigation concerning the storage of hazardous waste at the site.

Consistency With Plans. Does the action conflict with local or agency zoning or with agency plans or policy of local, state or federal government?

The proposed action does not conflict with any state or federal zoning plans or policies. The proposal is consistent with the feasibility report completeness requirements of Chapter NR 181 and the federal requirements of Title 40 Code of Federal Regulations (CFR) Parts 260 through 264 and 270.

As mentioned above CIC and the city are involved in litigation over the existing storage of hazardous waste. At issue is a city ordinance requiring an occupancy permit.

The current solid and hazardous waste facility siting law, Chapter 374, Laws of 1981 was passed by both the state assembly and senate, signed by the governor and became effective on May 7, 1982. This law sets up a local approval and negotiation and arbitration process for issues raised by local units of government regarding proposed waste facilities. Existing hazardous waste facilities with interim status are treated as unlicensed proposed facilities for the purpose of obtaining their initial operating license. The initial step in this process is the facility contacting the affected community(ies) to request information on necessary local approval.

Once the facility has contacted the community, then the community has 15 days to respond to the request with information on the necessary local approvals. If the facility does not receive a response or the community responds by stating there are no local approvals, the facility may submit its feasibility report to the Department 120 days after the 15 days have ended or when the community response is received. If the community responds by providing a list of local approvals, then the facility must apply for those approvals. The feasibility report can be submitted 120 days after application for local approval has been made.

Upon receipt of the request for local approvals, the affected community may also commence the negotiation/arbitration process in order to resolve local conflicts concerning the facility. The community may begin this process by adopting a siting resolution. A community has 60 days after receiving the request to file a siting resolution. A siting resolution can reflect the community's concerns and special conditions it wants written into the facility's license. A siting resolution must state the affected community's intent to negotiate and, if necessary, arbitrate with the facility. If no siting resolution is adopted by a community, the applicant is not required to negotiate with that community concerning the facility in the future. A copy of the siting resolution must be sent to the facility and the Waste Facility Siting Board. The Waste Facility Siting Board is a group consisting of certin state agency head and local government representatives whose task it is to arbitrate conflicts which the facility and community are unable to resolve.

CIC has complied with all the the applicable requirements of the State of Wisconsin's siting law. On January 6, 1982 the Common Council of the City of Milwaukee was notified by letter of the CIC's intention of constructing an incinerator and provided with a copy of the initial incinerator submittal report. On March 6, 1984 CIC informed both the City and County of Milwaukee of their intent to obtain a license to operate a hazardous waste storage facility and requested information on any necessary local approvals. Milwaukee County responded on March 30, 1984 in a letter stating that they had no requirements for local permits or approvals. The City of Milwaukee, however, did not respond to either the January 6, 1982 letter or the March 6, 1984 letter informing CIC of any necessary local approvals. Also, neither the city nor the county adopted a siting resolution.

Cumulative Impacts. While the action by itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment?

Each hazardous waste storage and/or treatment (including incineration) proposal is reviewed separately on its own merits. As mentioned earlier in this section, there are numerous hazardous waste storage and treatment facilities in the Milwaukee County. All of these facilities will have to undergo licensure by the Wisconsin Department of Natural Resources or stop storing or treating hazardous waste. Each additional incinerator feasibility report will be reviewed as it comes in by the Hazardous Waste Management Section and the Bureau of Air Management. If cumulative impacts of the facilities would jeopardize the National Ambient Air Quality Standards then stronger restrictions on air emissions and/or additional air pollution control devices will be required.

Foreclose Future Options. Is the action irreversible? Will it commit resource for the foreseeable future?

The proposal does not foreclose future options. The action is not irreversible. CIC could, at any time stop accepting hazardous waste for storage or decide not to operate its incinerator. The license does not require CIC to carry out these tasks, but allows CIC to conduct these activities in conformance with the requirements of Chapter NR 181 Wisconsin Administrative Code and the conditions of the plan approval in an environmentally safe manner. Also, CIC customers could decide to ship their wastes to alternative facilities.

The area occupied by the hazardous waste storage and by the incinerator will be committed to this project but this commitment is not irreversible. Once the decision to close the facility is made, then the storage pad and the incinerator will be properly decontaminated and disposed of in accordance with the CIC closure plan. An irrevocable letter of credit issued by the marshall and Ilsley Bank insures adequate funds are available for closure.

Socio-cultural Impacts

This action will not result in any direct or indirect impacts on any ethnic or cultural groups or alter social patterns. While people in nearby residential neighborhoods may not like the prospect of living near a hazardous waste storage facility, CIC has been at its present location for over 12 years without any apparent problems and without many residents apparently being aware of it.

As stated earlier in this assessment, Milwaukee is a city with a strong industrial base. This industrial base produces large quantities of hazardous waste as well as uses many hazardous materials. These industries are located in industrial areas and parks throughout the City and County of Milwaukee. Many of these industrial areas could border residential neighborhoods. How the City of Milwaukee wishes to deal with this is a local issue.

LIST OF AGENCIES, GROUPS AND INDIVIDUALS CONTACTED REGARDING THE PROJECT

U.S. Environmental Protection Agency-Region V - Al Debus Commerce Industrial Chemical, Inc. - Harriet Pedersen Kelly Company - Mark Difazio

Wisconsin Department of Natural Resources

Bureau of Solid Waste - Systems Management Section - Wayne Ringquist Bureau of Air Management - Steve Klafka and Raj Vakharia Bureau of Environmental Analysis and Review - Lou Posekany, Ed Bergman and Roger Fritz Bureau of Endangered Resources - Bill Smith Bureau of Parks and Recreation - Anthony Les

Southeast District

Solid Waste - Vic Pappas and Jim Schmidt Environmental Impact - Jim Morrisey Parks - Al Stenstrup

5274Q

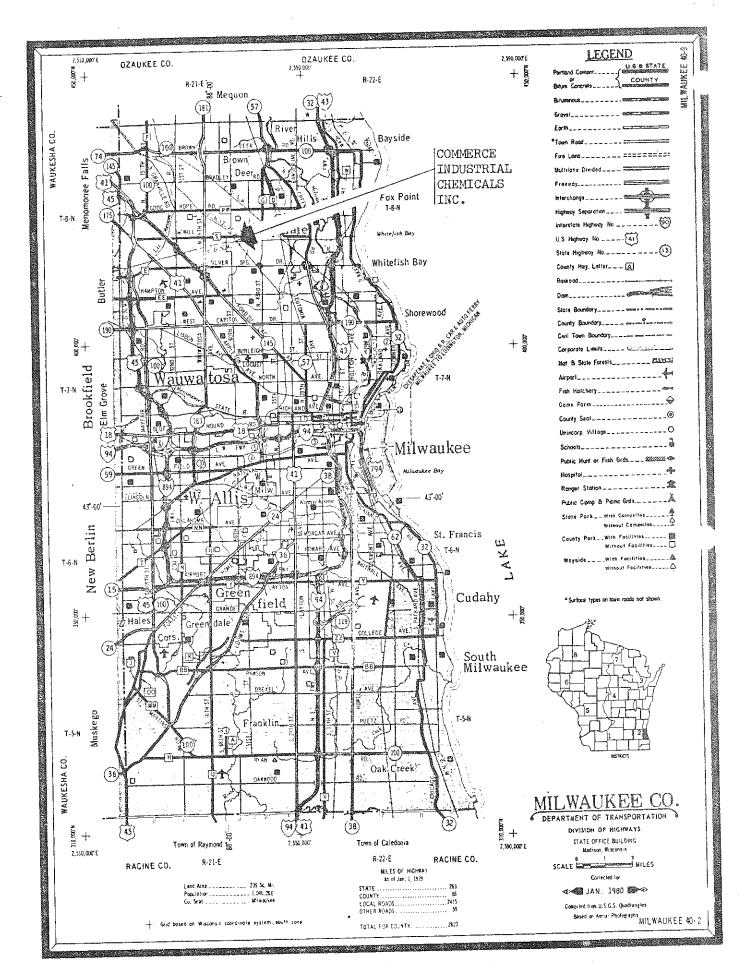
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Request EIR				
Additional factors, if any, a	ffecting the evaluator's recomm	nendation:		
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	NOTED AREA DIRECTOR OR BUREAU DIRE	CTOR	0///85 DATE	
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Public response log attached?	• • • • • • • • • • • • • • • • • • •			
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Director of BEI. If you beli should know that Wisconsin St within which requests to revi review of a decision pursuant after service of the decision an action for judicial review	atil certified by the appropriate eve you have a right to challer atutes and Administrative Codes with the code of	nge this dec s establish e filed. Fo ts., you hav iew. The re Resources.	ision, you time periods r judicial e 30 days spondent in You may wish	

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ATTACHMENTS

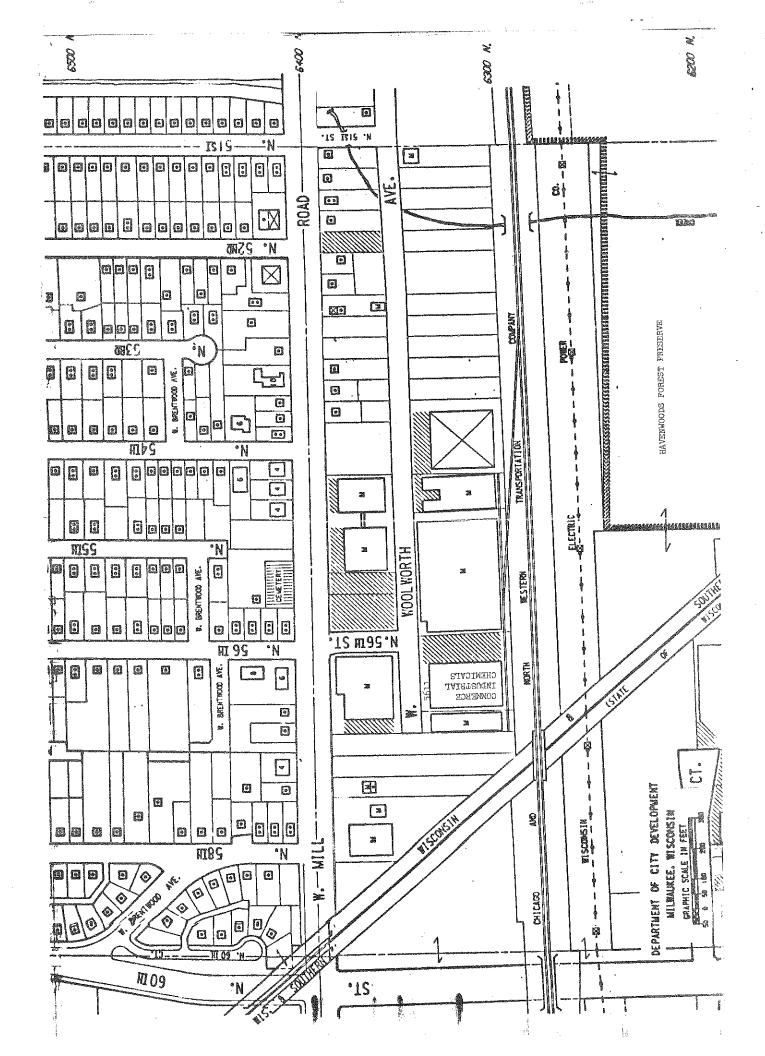
- 1. Milwaukee County Map
- 2. City of Milwaukee Land Use Map and Legend
- 3. City of Milwaukee Zoning Map and Legend
- 4. Location Map Showing Incinerator, Feedtank and Storage Area
- 5. Trial Burn Data
- 6. Bureau of Air Management Permit
- 7. CIC Correspondence Concerning Local Approvals
- 8. Havenwoods Species List of Plants
- 9. Havenwoods Species List of Wildlife
- 10. Map of Havenwoods
- 11. University of Wisconsin-Milwaukee, Department of Chemistry Comments

52740



LAND USE LEGEND

	SOMPOLER SANTAGE
•	SINGLE FAMILY
	TWO FAMILY
3	MULTI - FAMILY
R	ROOMING HOUSE
Н	HOTEL
•	COMMERCIAL WITH RESIDENCE
	COMMERCIAL
	MIXED COMMERCIAL
	OFFICES OR PROFESSIONAL SERVICES
M	MANUFACTURING & WAREHOUSING
U	UTILITIES
0	STORAGE TANK
Α	ACCESSORY BUILDING
52	HOSPITAL
	SKILLED CARE FACILITY
-	CHURCH
	NON-PUBLIC EDUCATION
	GOVERNMENTAL OR QUASI-PUBLIC BUILDING
P	POLICE STATION
F	FIRE STATION
P.S.	PUBLIC SCHOOL
P.G	PLAY GROUND
	PARK
	CEMETERY
	PARKING
	VACANT



CITY OF MILWAUKEE AND ENVIRONS

example damp damp of empas

HEIGHT DISTRICTS

1707 40 FOOT HEIGHT DISTRICTS

(65) 60 FOOT HEIGHT DISTRICTS

137 85 FOOT HEIGHT DISTRICTS

1737 125 FOOT HEIGHT DISTRICTS

PO PLANNED DEVELOPMENT DISTRICTS

7 FLOOD PLAIN

B ZONING MAP

USE DISTRICTS

RESIDENCE DISTRICTS

LOCAL BUSINESS DISTRICTS

(COMMERCIAL & LIGHT MFG DISTRICTS

INDUSTRIAL DISTRICTS

[3] NEIGHBORHOOD SHOPPING DISTRICTS

P PARKING DISTRICTS

AGRICULTURAL DISTRICTS W/ FLOOD PLANE

RESTRICTED OFFICE DISTRICTS

MAJOR COMMERCIAL DISTRICTS

ED PLANNED DEVELOPMENT DISTRICTS

LETTER BATH by (magnerous

ZONING MAP

AREA DISTRICTS

A AREA DISTRICTS

F-I AREA DISTRICTS

ED B AREA DISTRICTS

E FZ AREA DISTRICTS

ETEL AREA DISTRICT

E3 F-3 AREA DISTRICTS

C AREA DISTRICTS

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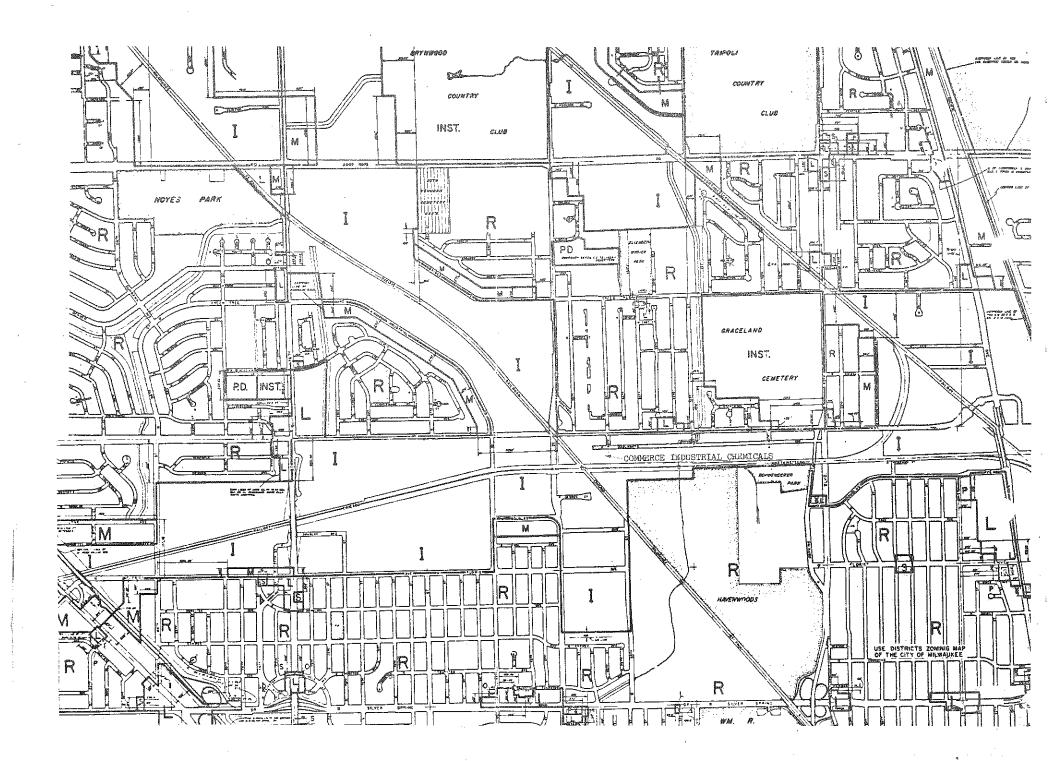
E F5 AREA DISTRICTS

LE E AREA DISTRICTS

G AREA DISTRICT

(ED) PLANNED DEVELOPMENT DISTRICTS ZZ FLOOD PLAIN

LUTUST 10, 1969



Woolworth W. 250.00' Hazardous Waste Incinerator Incinerator Hazardous Waste Storage Area Feed Tank Brick é Concrete Block Building # 5611 Scale: |" = 50'

Chicago & Northwestern R.R.

261.90'

LOCATION MAP

Attachment #4

OFFICE MEMORANDUM

DATE:

October 5, 1982

TO:

K. Erlandsson

FROM:

M. DiFonzo

SUBJECT:

Federal EPA Testing at Zapata

Visited the Zapata installation in Butner, N.C. the week of Sept. 27, 1982 to observe the Federal EPA testing for hazardous waste incineration. The unit tested was a standard KCI 380 Batch with Liquid Injection. Personnel in attendance were as follows:

> Ben Smith - Federal EPA Ken Wilcox - Midwest Research Institute Kausar City, Mo. Paul Golman - Midwest Research Institute 8/6-753-7600 Mike Seaney - Zapata Rick Dibble - KCI

The material incinerated at the Zapata installation consisted mainly of varnish and thinners.

In order to standardize the tests with the testing of other units, a "spiking compound" was added to the liquid waste. This spiking compound consisted of 1.5 liters of the following per 55 gal. of liquid waste:

> Carbon tetrachloride Trichloroethylene Chlorobenzene

The tests conducted by the EPA were as follows:

Standard EPA Method 5 with impingers

Orsat sampling (yields ${\rm CO}_2$, ${\rm CO}$, and ${\rm O}_2$ levels) Volatile organic sampling (for future analysis)

a.) Gas bag method

b.) Vost train method

Continuous monitoring of the following:

a.) Hydrocarbon levels (analyzer based on propanegives poor results for chlorinated or high 02 content hydrocarbon).

b.) Carbon monoxide levels (infared analyzer)

c.) Oxygen levels

Throughout the testing, samples of the liquid waste were drained and collected from the feed tank and ash samples were collected upon completion of the tests. Federal EPA Testing at Zapata Page 2

The first test run showed inconsistent readings caused by the continuous monitoring probes being located in the flame and will probably be discarded. With the probes properly relocated, the following 3 test runs were conducted without further problems. Preliminary results of the continuous monitors are as follows:

Carbon monoxide - 5-10 ppm Hydrocarbon - 2-4 ppm Oxygen - 11.5%

Although these initial results are very encouraging, the actual value of the Destruction and Removal Efficiency will not be available until the test reports are completed. Midwest Research anticipates at least 2 to 3 months before the reports will be released.

Mark DiFonzo

MD/rd

cc; R. Dibble

J. Kidd

B. Miller

L. Renaud KE-82-178

and the second s

TABLE A

KELLEY COMPANY, INC. 6720 North Teutonia Avenue Milwaukee, Wisconsin 53209 (414) 352-1000 Telex 26-661

STACK OUTPUT RATES FOR VOLATILE POHC's - g/min^a

(Blank Corrected)

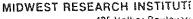
	RUN 1	RUN 2	RUN 3	RUN 4
Methylene Chloride	.000075	.000221	.000026	.00004
Carbon Tetrachloride	.00228	00019	.0058	.00011
Trichloroethylene	.0007	0005	.0007	00072
Toluene	.000000	.00012	.00011	.00018
Chlorobenzene	.000225	.00008	.00050	.000051

TABLE B
POHC DRE^{ab} (Blank Corrected)

	RUN 1	RUN 2	RUN 3	RUN 4	AVERAGE
Methylene Chloride	99.813	99.779	~~~~ ~ ~	50 50 TO AS AS ST. CO.	on su se vet ret se
Carbon Tetrachloride	99.972	100.003	99.884	99.995	99.964
Trichloroethylene	99.990	100.010	99.983	100.036	100.005
Toluene	100.000	99.996	99.982	99.994	99.993
Chlorobenzene	99.996	99.999	99.992	99.998	99.996

- a Data Obtained by Gas Bag Sampling Method
- b Destruction and Removal Efficiency calculated by the following formula:

DRE =
$$\frac{W \text{ in} - W \text{ out}}{W \text{ in}} \times 100$$



FRE

425 Volker Boulevard Kansas City, Missouri 64110 Telephone (816) 753-7600

December 6, 1982

Mr. Ben Smith
U.S. EPA
Office of Solid Waste (WH-565)
401 M Street, S.W.
Washington, D.C. 20460

Mr. Don Oberacker U.S. EPA Incineration Research Branch 26 West St. Clair Cincinnati, Ohio 45268

Subject: Preliminary Summary Tables of Data for Tests at ZAPATA.

Dear Ben and Don:

Enclosed are 17 data tables from the ZAPATA tests. POHC and PIC data are presented in terms of concentration and emission rates. Tables of blank concentrations are also included. All Method 5 and continuous monitoring results, including chlorides, particulate weight, and total hydrocarbons are also included.

If you have any questions or comments about the results presented in the enclosed tables give me a call.

Sincerely yours,

MIDWEST RESEARCH INSTITUTE

Andrew Trenholm, Section Head Special Programs

AT:mmd

Enclosures

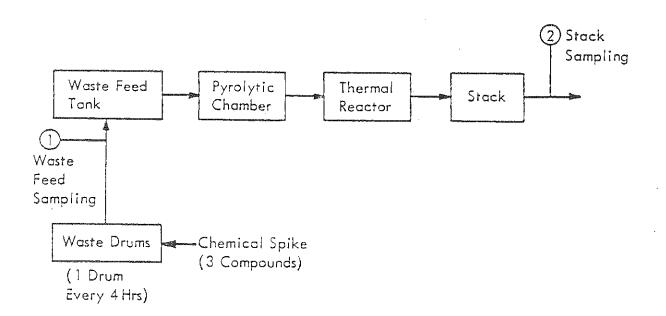


Figure 1 - Summary of Sampling Locations

Sam	pling Point	Number of Samples per Run	Sampling Method	Analysis
1.	Waste Feed	1 Composite	1 to 2 Grabs	HHV Volatile POHCs C1 H ₂ O
2.	Stack			
	M5 Train	1	M5	Particulate weight
	Volatile Train	1	VOST Train	Volatile POHCs, PICs
	Gas Bags CO_2 and O_2 CO_3 and HC_3	1 2 Continuous	Gas Bags ORSAT Continuous Monitors	Volatile POHCs, PICs CO_2 and O_2 CO , O_2 , and HC

Figure 2 - Summary of Sampling and Analysis

TABLE 1. ZAPATA PROCESS DATA

#	Run 1,	Run 2,	Run 3,	Run 4,
	9/28/82	9/29/82	9/29/82	9/30/82
Calculated residence time (sec)	0.22	0.20	0.20	0.20
Main chamber	670	720	737	689
temperature, °C (°F)	(1,240)	(1,330)	(1,360)	(1,274)
Secondary chamber temperature, °C (°F)	854	867	844	904
	(1,570)	(1,594)	(1,553)	(1,661)
Energy input ^b (Btu/hr x 10 ⁶) GJ/hr	1.5 (1.4)	1.7 (1.6)	1.1 (1.0)	0.71 (0.67)
Main chamber pressure negative Pa (negative in H ₂ 0)	19.9	19.9	17.4	17.4
	(0.08)	(0.08)	(0.07)	(0.07)
Atomizing air	207	207	207	207
pressure kPa (psig)	(30)	(30)	(30)	(30)
Water flow to main chamber, 2/hr (gph)	18.9	41.6	45.4	41.6
	(5)	(11)	(12)	(11)
Natural gas, Nm³/hr	10.9	9.9	10.6	10.2
(scf/hr)	(385)	(350)	(375)	(360)
Electric power (kW)	4	4	6.9	4
Stack exit velocity,	656	637	687	702
M/min (ft/min)	(2,153)	(2,090)	(2,255)	(2,302)
Stack temperature, °C (°F)	663	611	646	679
	(1,225)	(1,132)	(1,195)	(1,254)

Residence time of secondary chamber. The design residence time is 0.22 sec.

Energy input from waste, not including natural gas.

TABLE 2. WASTE FEED RATES

	kg/min	lb/hr
Run 1	0.66	87
Run 2	0.76	101
Run 3	0.78	103
Run 4	0.77	102

TABLE 3. POHC CONCENTRATIONS IN WASTE FEED $(\mu g/g)$

	Run 1	Run 2	Run 3	Run 4
Methylene chloride	64	170	ND ^a	ND ^a 2,800 2,900 4,200 4,000
Carbon tetrachloride	12,000	7,300	6,100	
Trichloroethylene	11,000	7,100	5,200	
Toluene	1,100	3,300	730	
Chlorobenzene	7,800	7,600	7,900	

^a < 5 μg/g.

TABLE 4. POHC INPUT RATE - g/min

	Run 1	Run 2	Run 3	Run 4
Methylene chloride	0.04	0.1	ND a	ND ^a
Carbon tetrachloride	8	6	5	2
Trichloroethylene	7	5	4	2
Toluene	0.7	3	0.6	3
Chlorobenzene	5	6	6	3

a < 0.004 g/min.

TABLE 5. STACK OUTPUT CONCENTRATIONS OF VOLATILE POHCs - ng/ℓ NOT BLANK CORRECTED

	Run 1 a,b Gas bags	Run 2		Run 3		Run 4 ^D Gas
		Gas bags	VOST	Gas bags	VOST	Gas bags
Methylene chloride	76	15	7.7	5.4	4.0	4.8
Carbon tetrachloride	114	19	3.9	308	5.1	14
Trichloroethylene	80	56	9.2	84	6.9	22
Toluene	18	28	16	18	3.4	24
Chlorobenzene	13	12	15	30	9	6

The volatile POHC sampling point was relocated higher up the stack for Runs 2, 3, and 4.

TABLE 6. STACK OUTPUT RATES FOR VOLATILE POHCs - g/min NOT BLANK CORRECTED

	Run 1			Run 3		Run 4 ^a
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Methylene chloride	0.00016	0.00032	0.00017	0.00011	0.000088	0.0001
Carbon tetrachloride	0.0024	0.00041	0.000084	0.0068	0.00011	0.0003
Trichloroethylene	0.0017	0.0012	0.00020	0.0019	0.00015	0.0004
Toluene	0.00038	0.00060	0.00035	0.00040	0.00023	0.0005
Chlorobenzene	0.00028	0.00026	0.00032	0.00066	0.00020	0.0001

There is no VOST data for Runs 1 and 4.

b There is no VOST data for Runs 1 and 4.

TABLE 7. BLANK CORRECTIONS FOR VOST AND GAS BAGS - ng/2

	Run 1	Run 2		Run 3		Run 4
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Methylene chloride	4.0	4.6	0.8	3.8	0.4	3.2
Carbon tetrachloride	5.8	28	0	46	0	9.0
Trichloroethylene	48	80	0.1	54	0.1	56
Toluene	18	22	5.7	13	0.8	16
Chlorobenzene	2.6	8.4	1.5	7.2	0.1	3.6

TABLE 8. BLANK CORRECTIONS FOR VOST AND GAS BAGS - g/min

	Run 1	Run	Run 2		Run 3	
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Methylene chloride	0.000085	0.000099	0.000017	0.000084	0.0000088	0.000070
Carbon tetra- chloride	0.00012	0.00060	0	0.0010	0	0.00020
Trichloro- ethylene	0.0010	0.0017	0.0000022	0.0012	0.0000022	0.0012
Toluene	0.00038	0.00048	0.00012	0.00029	0.000018	0.00035
Chlorobenzene	0.000055	0.00018	0.000032	0.00016	0.0000022	0.000079

TABLE 9. STACK OUTPUT PIC CONCENTRATIONS - ng/ℓ NOT BLANK CORRECTED

	Run 1	Run 1 Run 2		Run 3		Run 4
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Chloroform	1.7	1.6	2.5	1.6	2.8	1.4
1,1,1-Trichloroethane	1.8	2.4	0.5	1.2	0.9	1.2
Benzene	34	58	38	7.4	12	30
Tetrachloroethylene	2.0	1.0	0.6	1.0	0.9	1.0

TABLE 10. STACK OUTPUT PIC RATES - g/min - NOT BLANK CORRECTED

	Run 1 Run 2		. 2	Run	Run 4	
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Chloroform	0.000036	0.000035	0.000054	0.000035	0.000062	0.000031
1,1,1-Tri- chloro- ethane	0.000038	0.000052	0.000011	0.000027	0.000020	0.000026
Benzene	0.00072	0.0013	0.00082	0.00016	0.00027	0.00066
Tetrachloro- ethylene	0.000042	0.000022	0.000013	0.000022	0.000020	0.000022

TABLE 11. OUTPUT BLANK CORRECTIONS FOR PICS - ng/l

	Run 1	Run 2 Run 3			1 3	Run 4
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Chloroform	1.0	0.6	5.0	0.8	1.0	0.8
1,1,1-Trichloroethane	0.8	1.0	NDa	0.8	$\mathtt{ND}^{\mathtt{a}}$	1.4
Benzene	1.8	4.6	5.9	4.0	1.6	5.6
Tetrachloroethylene	0.6	0.6	0.4	0.6	0.1	0.4

a ND = < 0.1 ng/l.

TABLE 12. OUTPUT BLANK CORRECTIONS FOR PICS - g/min

	Run 1	Run 2		Run	Run _4	
	Gas bags	Gas bags	VOST	Gas bags	VOST	Gas bags
Chloroform	0.000021	0.000013	0.00010	0.000018	0.000022	0.000018
1,1,1-Tri- chloro- ethane	0.000017	0.000022	ND ^a	0.000018	ИDa	0.000031
Benzene	0.000038	0.000099	0.00013	0.000088	0.000035	0.00012
Tetrachloro- ethylene	0.000012	0.000013	0.0000086	0.000013	0.0000022	0.0000088

 $^{^{}a}$ ND = < 0.000002 g/min.

TABLE 13. METHOD 5 TEST DATA

	Run 1	Run 2	Run 3	Run 4
Vol. of gas sampled, Nm ³ (dscf)	1.840 (64.981)	1.962 (69.291)	2.018 (71.258)	1.969 (69.532)
Sampling time (min)	144	144	144	144
Percent isokinetic .	96.9	101.2	102.1	100.2
Moisture content (%)	8.7	9.7	11.1	10.5
Percent O ₂ (dry)	13.3	12.1	11.2	11.1
Percent CO ₂ (dry)	5.8	6.6	6.5	6.7
Stack flow rate, act. m ³ /min (act. ft ³ /min)	75 (2,642)	73 (2,565)	78 (2,767)	80 (2,825)
Stack temperature, °C (°F)	663 (1,225)	611 (1,132)	646 (1,195)	679 (1,254)
Stack flow rate, Nm ³ /min (dscf/min)	21 (749)	22 (765)	22 (780)	22 (775)

TABLE 14. GENERAL ANALYSIS OF WASTE FEED

	Percent Cl	Percent water	Heating value kJ/kg (Btu/lb)
Run 1	2.69	0.68	37,544 (16,155)
Run 2	1.62	0.63	37,891 (16,304)
Run 3	0.29	36.58	22,796 (9,809)
Run 4	0.87	54.39	15,227 (6,552)

TABLE 15. STACK C1 EMISSION RATES

	g/min of Cl	lb/hr of Cl
Run 1	16.9	2.23
Run 2	10.5	1.39
Run 3	20.8	2.75
Run 4	25.0	3.30

TABLE 16. PARTICULATE EMISSION DATA

Run 1	Pup 2	Pup 2	Dan /
Null 1	Kun Z	Kun 3	Run 4
ncentration r/dscf)			
37.8	31.8	57.3	27.1
(0.0165)	(0.0139)	(0.0250)	(0.0118)
69.1	50.2	81.9	38.5
(0.0301)	(0.0219)	(0.0357)	(0.0168)
	37.8	ncentration	ncentration
	(0.0165)	r/dscf) 37.8 31.8	r/dscf) 37.8 31.8 57.3
	69.1	(0.0165) (0.0139) 69.1 50.2	(0.0165) (0.0139) (0.0250) 69.1 50.2 81.9

^a Measured emissions were corrected to 7% O_2 as follows:

$$C_{corr} = \frac{(14\%)}{(21\% O_2)} (C_{measured})$$

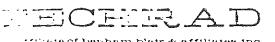
TABLE 17. CONTINUOUS MONITORING DATA (STACK OUTLET) a,b

	Run 2 9/29/82	Run 3 9/29/82	Run 4 9/30/82
Oxygen (%)			
Range	11.5-12.8	11.6-12.5	11.6-12.2
Average	12.0	11.9	11.9
Carbon monoxide (ppm)			
Range	3.6-72.2	3.6-5.5	5.0-20.1
Average	18.4	4.7	10.0
Total hydrocarbons (ppm) ^c			
Range	0-2.6	0.0	0.0
Average	0.5	0.0	0.0

a Concentrations on dry gas basis.

b Information not available for Run 1.

Total HC reported as propane.



technology research & development, inc.

laboratory, 4619 north santalle oklahoma city, oklahoma 73118 a/c 405/528-7016

August 20, 1980

Frofessional Safety, Inc. E225 N. Shartel, Suite 201 Oklahoma City, OK 73118 ZAPATA WASTE ANALYSIS

Attn: Mr. Mike Seney

Report of Analysis.

Nine Samples Received July 22, 1980. One Sample Received July 25, 1980

Laboratory No. Identification	800634 2013 Lacquer Hi-Sol-15 Thinner	800635 3006 Varnish 3006-T Solvent	800636 2002+ 2006-T	800637 2006-T+ Little 2012	800638 4006 White Coating Cellusolve Acetate Solvent
Parameter - All	mg/L unless not	ed			
Chloride Nitrogen, Kjelda	31 ahl	51	51	31	31
as N	12	21	440	13	38
Specific Gravity	∕ •	•			
g/mL	0.978	0.933	0.895	0.811	0.979
Sulfur, mg/Kg	<3.1	6.6	11	5.8	6.2
g/ML Sulfur, mg/Kg Tlash Point, F	174	169	109*	129*	174
rsenic	0.30	0.10	0.06	0.01	0.18
Barium	0.5	<0.5	<0.5	< 0.5	<0.5
Cadmium	0.04	<0.01	<0.01	<0.01	<0.01
Chromium	19**	33**	15**	48**	730**
Lead	0.07	<0.05	<0.05	0.16	0.83
Mercury	<0.005	<0.005	0.006	<0.005	0.033
Selenium	0.01	<0.01	<0.01	0.23	0.15
Silver	<0.05	<0.05	<0.05	0.27	0.29

^{*} Flash point less than 140 degrees farenheit rates waste as hazardous because of following characteristic: ignitability

^{**} Chromium concentration greater than 5 mg/L rates waste as hazardous because of following characteristic: EP Toxicity

800539 4000 Size Cellusolve Acetate	800640 4003 Size Cellusolve Acetate	800641 3009 Varnish Cellusolve Acetate	800642 4002 Size 4002-T Thinner	800651 2006+ 2006-T
ng/L unless r	noted			
31	20	92	92	35
88	16 .	3200	23	<1.0
0.968 3.3 169 <0.01 <0.5 0.02 2.3 0.25 0.013 0.06 <0.05	0.965 <3.2 180 0.02 <0.5 <0.01 21** 0.14 0.009 <0.01 <0.05	0.988 160 169 0.31 <0.5 <0.01 84** <0.05 <0.005 0.60 0.12	0.895 5.9 119 * 0.01 <0.5 <0.01 38** 0.31 0.006 0.01 <0.05	0.865 5.8 108 * 0.27 <0.5 <0.01 6.2** 0.53 0.035 0.35 <0.05
	4000 Size Cellusolve Acetate mg/L unless r 31 nl 88 0.968 3.3 169 <0.01 <0.5 0.02 2.3 0.25 0.013 0.06	4000 Size 4003 Size Cellusolve Cellusolve Acetate Acetate mg/L unless noted 31 20 ml 88 16 0.968 0.965 3.3 <3.2 169 180 <0.01 0.02 <0.5 <0.5 0.02 <0.05 0.02 <0.01 2.3 21** 0.25 0.14 0.013 0.009 0.06 <0.01	4000 Size 4003 Size 3009 Varnish Cellusolve Cellusolve Cellusolve Acetate Acetate Acetate mg/L unless noted 31 20 92 ml 88 16 3200 7 0.968 0.965 0.988 3.3 <3.2 160 169 180 169 <0.01 0.02 0.31 <0.5 <0.5 <0.5 0.02 <0.01 <0.5 0.02 <0.01 2.3 21** 84** 0.25 0.14 <0.05 0.013 0.009 <0.005 0.06 <0.01 0.60	4000 Size

Respectfully submitted,

TECHNOLOGY RESEARCH & DEVELOPMENT, INC.

Diane Howard

Diane Howard Lab Supervisor

DH:ss

^{*} Same as on page 1

^{**} Same as on page 1



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny

Secretary

BOX 7921 MADISON, WISCONSIN 53707

IN REPLY REFER TO: 4530

May 18, 1982

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Donald Michalski, President Commerce Industrial Chemicals 5611 West Woodworth Avenue Milwaukee, WI 53209

Dear Mr. Michalski:

Your application for an air pollution control permit has been processed in accordance with Section 144.392, Wisconsin Statutes.

The enclosed permit is issued to provide authorization for your source to construct and operate in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully. A release for permanent operation (construction release) will be issued after verification that the source was constructed (or modified, or replaced, or reconstructed) and initially operated according to the plans and specifications as approved by the Department and that it will continue to operate in conformity with the conditions of the permit.

The conditions contained within this permit may be modified as a result of rulemaking required of the Department as a result of Chapter 144, Wisconsin Statutes or the adoption of standard permit forms and procedures which may differ from this interim document. At the time of such modification, permits reflecting these changes will automatically be issued to your source superseding this interim form.

This permit, or a copy, should be available for inspection upon request. Questions about this permit should be directed to the Bureau of Air Management, P.O. Box 7921, Madison, Wisconsin 53707, (608) 266-7718.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Donald F. Theiler, Director

Bureau of Air Management

Attach. 1640Q

cc: Air Enforcement Branch - EPA, Region V Southeast District Air Program

AIR POLLUTION CONTROL PERMIT

ATTAINMENT AREA MINOR SOURCE

EI FACILITY NO.	<u> </u>	PERMIT	NO. MI	<u>4-12-53 K-82-41</u>	-011
STACK NO.(S).	N/A	TYPE:	Permit	to Construct	& Operate
SOURCE NO.(S).	N/A				
PERMISSION TO COM THIS PERMIT IS IS: ISSUED, THIS OPER SUSPENDED.	SUED. ONCE A R	ELEASE FOR PER	RMANENT	OPERATION HAS	RFFN
In compliance with Chapters NR 154 and	h the provision nd NR 155, Wisc	s of Chapter onsin Adminis	144, Wise trative	consin Statute Code,	es, and
Name of Source	e: Commerce In	dustrial Chem	icals		
Street Addres	s: 5611 West W Milwaukee,		ıe		
Principal Exe	cutive Officer	& Title: Don	ald Mich	alski, Preside	ent
is authorized to system capable of to air heat recov specifications da	burning liquid ery system in s	l and solid was strict conform	stes and ity with	equipped with the plans and	i a Cain air
This authorizatio limitations, moni in Parts I and II	toring requirem	oliance by the ments and other	permit r terms	nolder with th and conditions	ne emission s set forth
Dated at Madison,	Wisconsin this	18 day o	f <u>May</u>		<u>,</u> 1982.
STATE OF WISCONSI DEPARTMENT OF NAT For the Secretary	URAL RESOURCES				
By L. F. Wible, P Division of En	.E., Administra vironmental Sta				
Attach. 1640Q	•				A 122 (02)

(Rev. 4/22/82)

PART I SPECIFIC PERMIT CONDITIONS

A. Emission Limitations

Pollutant	Applicable Yes No	Applicable Wisconsin Adm. Code or Statute	Limitation Requirement
Particulates	X	NR 154.11(5)(a)1.c., Wis. Adm. Code	0.30 pounds per 1000 pounds of exhaust gas corrected to 12% CO ₂
Sulfur Dioxide			
Organic Compounds	X		
Nitrogen Dioxide	X		
Carbon Monoxide	X		
Visible Emissions (Opacity)	X	NR 154.11(6)(a)l., Wis. Adm. Code	#1 of the Ringelmann Chart or 20% Opacity
Malodorous Emissions	, X		
Hazardous Substances: (Specify)	X		
Other: (Specify)	Х		

B. Other Specific Conditions

1. Initial Operation Notification

The permittee shall inform the Wisconsin Department of Natural Resources, Southeast District Air Program, 1011 Mayfair Road, P.O. Box 13248, Milwaukee, WI 53213 thirty (30) days prior to initial operation of the source covered by this permit. Furthermore, the permittee shall send the District construction progress reports every 30 days until a release for permanent operation is granted.

2. Release for Permanent Operation

This permit does authorize an initial operation period of 60 days for equipment shake-down, testing and Department evaluation of operation to assure conformity with the permit conditions. Permanent operation of the source(s) covered by this permit after the initial operation period is prohibited until a release has been issued by the Department.

- 3. Only wastes for which the incinerator has been designed and approved shall be disposed of through this unit. Manufacturer's recommendations shall be strictly observed.
- 4. Only properly trained operators shall be allowed to operate this incinerator. Manufacturer's operating and maintenance instructions shall be followed at all times. These instructions shall be visibly posted in the vicinity of the incinerator.
- The incinerator shall be operated and maintained in a clean and pollution-free manner.

16400

PART II GENERAL PERMIT CONDITIONS FOR DIRECT STATIONARY SOURCES

A. Scope

This permit is valid only for the structure, building, facility, equipment or operations specifically identified herein. All emissions authorized hereby shall be consistent with the terms and conditions of Parts I and II of this permit.

B. Prevention of Air Pollution

No person may cause, allow or permit the emissions of any air contaminant into the ambient air from a source subject to this permit which substantially contribute to the exceeding of an air standard or which cause air pollution.

C. Notification Requirements

Pursuant to sec. 144.394(3), Wis. Stats. and section NR 154.06(1) and (2)(f), Wis. Adm. Code, the Department shall be notified of the following events:

Event

Hazardous substance air spill

Malfunction or event not reported in advance which causes or may cause any violation of an emission limitation.

Noncompliance with any other condition Written notification within 5 days identify within 5 days identified within 6 days identified within 6

Timing

Immediate-call: (608)266-3232

Within 8 hours of onset

Written notification within 5 days identifying noncompliance, cause, duration, and steps taken to prevent reoccurrence.

D. Advance Notice of Startup or Shutdown

The permittee shall report to the Department in advance schedules for planned shutdown and startup of air pollution control equipment and the measures to be taken to minimize the down time of the control equipment. Scheduled maintenance or startup of other equipment which causes an emission limit to be exceeded shall also be reported in advance to the Department. Advance reporting pursuant to this permit condition or section NR 154.06(2)(h), Wis. Adm. Code, shall not relieve any person from the duty to comply with any applicable emission limitations.

E. Right of Entry

Pursuant to sec. 144.34, Wis. Stats., the permittee shall allow authorized representatives of the Department of Natural Resources to enter upon the permittee's premises; to have access to and copy any records required to be kept under the terms and conditions of this permit; and to make any inspection necessary to ascertain compliance.

F. Malfunction Prevention and Abatement Plans

Pursuant to section NR 154.06(9), Wis. Adm. Code, the owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants shall prepare a written malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any emission limitation to be violated or which may cause air pollution. Any such plan shall be carried out by the owner or operator. The plan shall be updated as needed and is subject to department review, approval and amendment.

G. Episode Plans

Pursuant to section NR 154.20(2), Wis. Adm. Code, if the source(s) covered by this permit emits 0.25 tons per day or more of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants, the permittee shall prepare an emission control action program consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution alert, air pollution warning or air pollution emergency. The emission control action program shall be in writing, available on the premises for inspection and subject to review and approval by the Department on request.

H. Permit Alteration, Revocation, Suspension

After notice and opportunity for a hearing, as provided in sec. 144.395, Wis. Stats., this permit may be altered, suspended, or revoked in whole or in part for cause, including but not limited to, the following:

- A significant or recurring violation of any term or condition of this permit;
- 2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- 3. A change in any applicable rule; or
- 4. Failure to pay any required permit fees.

I. Civil Liability

Nothing in this permit shall be construed to relieve the permit holder from civil penalties under sec. 144.426, 144.96 or 144.99, Wis. Stats., for violation of the terms or conditions of this permit, or for violation of secs. 144.30 to 144.426, 144.76 and 144.96, Wis. Stats., or of any rule or any special order issued under those sections.

J. Other Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permit holder from any responsibilities, liabilities, or penalties established pursuant to any other applicable Federal, State, or local law or regulation. The issuance of this permit does not convey any property rights in either real or personal property, nor does it authorize any injury to private property or any invasion of personal rights.

K. Records Retention

All records and information resulting from any monitoring activities required by this permit shall be retained by the permittee for a minimum of three years (or longer if requested by the Department) pursuant to section NR 154.06(3), Wis. Adm. Code.

L. Reporting

Reports required by Part I of this permit, if any, shall be signed by an authorized representative of the source.

M. Confidential Information

Except for information determined to be confidential under sec. 144.33, Wis. Stats., any information or reports received by the Department in the permit application process, or subsequently obtained, will be available for public inspection at the offices of U.S. Environmental Protection Agency and the Department of Natural Resources.

N. Notification of Transfer

In the event of a transfer of control of operation or ownership of the source, the permittee, prior to such transfer, shall notify its successor by letter of the need for a permit. A copy of this letter shall be forwarded to the Department.

O. Nonexempt Modifications

"Modification" means any change in the physical size or method of operation of a stationary source which:

- (1) increases the potential amount of emissions of an air contaminant;
- (2) results in the emission of an air contaminant not previously emitted; or
- (3) results in the violation of an ambient air increment.

Any modification of the source(s) subject to this permit is prohibited unless the modification is an exempt modification or the modification is authorized by a permit. The following changes in method of operation are exempt modifications if the specified change does not cause or exacerbate the violation of an ambient air quality standard or increment and if the change in method of operation does not result in the violation of any other term or condition of this permit:

- 1. An increase in production rate if that increase does not exceed the operating design capacity of the source.
- 2. An increase in the hours of operation of the source.
- 3. Use of an alternate fuel or raw material if the source is designed to burn or use the alternate fuel or raw material and if that information is included in the plans, specifications and other information submitted under sec. 144.392(2), Wis. Stats. or under sec. 144.39(1), Wis. Stats. (1977).
- 4. Resumption of operation of a source after a period of closure if the existing equipment was continuously included in the source inventory as an existing source covered by plans under sec. 144.31(1)(f), Wis. Stats.
- A change in ownership of the source.

P. Reconstruction or Replacement

Unless authorized by a permit, replacement of the source(s) covered by this permit is prohibited. If the source(s) covered by this permit is a nonattainment major source, reconstruction may also be prohibited unless authorized by a permit.

Q. Circumvention

Pursuant to section NR 154.06(8)(a), Wis. Adm. Code, the installation or use of any article, machine, equipment, process, or method, which conceals an emission which would otherwise constitute a violation of an applicable rule is prohibited unless written approval has been obtained from the Department. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance and the unnecessary separation of an operation into parts to avoid coverage by a rule that applies only to operations larger than a specified size.

R. Operating Permit Renewal

Certain operating permits for which a complete application was received prior to April 30, 1980 may be subject to renewal five years after issuance. An operating permit may be renewed subject to the rules in effect at the time of application for renewal. Renewal applications shall be filed in accordance with sec. 144.397, Wis. Stats., (as affected by Ch. 34, Laws of 1979). An operating permit shall continue to be valid during any review time associated with renewal, provided the permit holder applies at least 180 days prior to the expiration date in accordance with sec. 144.397, Wis. Stats., (as affected by Ch. 34, Laws of 1979).

S. Forfeitures

In addition to other penalties or remedies, sec. 144.426, Wis. Stats., provides that any person who violates this permit shall forfeit not less than \$10 nor more than \$25,000 for each violation. Each day of continued violation is a separate offense.

T. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

P.O. Box 13248 Milwaukee, WI 53213-0248

MAR 10 1982

February 10, 1982

4530

Mr. Donald J. Michalski Commerce Industrial Chemicals Inc. 5611 West Woolworth Ave. Milwaukee, WI 53209

Dear Mr. Michalski:

The Engineering and Surveillance Section, Bureau of Air Management of the Department of Natural Resources has preliminarily reviewed the air pollution control permit application regarding the proposed Kelly Model 380 Pyrolytic Incineration System capable of burning liquid and solid wastes and equipped with a Cain air to air heat recovery system.

The Section has recommended tentative conditional approval of the project and will now accept public comments on the proposed installation as required by Section 144.392(6) and (7), Wisconsin Statutes. Comments will be received for 30 days after publication of a Department notice. The public input, if any, will also be reviewed to note if significant public interest in the project exists and whether a public hearing is warranted. If a hearing is warranted, it would be held within 60 days from the end of the public comment period. Finally, all public input will be used to render a final decision within another 60 days unless compliance with Wisconsin's Environmental Policy Act requires a longer time.

Please be advised that this is only a preliminary determination and approval. Construction (or modification or replacement or reconstruction) and operation cannot commence until a permit is received from the Department. If you have any questions regarding this matter, please feel free to contact me at (414) 257-4930.

Sincerely,

William Haas

Environmental Engineer

WH:as

cc: Bureau of Air Management - AIR/3

Bureau of Solid Waste Management - SW/3

PRECONSTRUCTION REVIEW AND PRELIMINARY DETERMINATION ON A PROPOSED NEW INCINERATOR WITH A HEAT RECOVERY SYSTEM FOR COMMERCE INDUSTRIAL CHEMICALS INC. TO BE LOCATED AT MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

This review was performed by the Wisconsin Department of Natural Resources, Bureau of Air Management in accordance with Sections 144.391 and 144.392, Wisconsin Statutes. This review is for a minor source which is located in or which may affect significantly an attainment area.

THIS IS ONLY A PRELIMINARY DETERMINATION. CONSTRUCTION (OR MODIFICATION) AND OPERATION CANNOT COMMENCE UNTIL THE APPLICANT HAS RECEIVED A PERMIT FROM THE DEPARTMENT.

NEW SOURCE REVIEW MIA-12-SJK-82-41-011

Wisconsin Department of Natural Resources
Bureau of Air Management
P.O. Box 7921
Madison, Wisconsin 53707

February 10, 1982

INTRODUCTION

Section 144.391, Wisconsin Statutes, empowers the Department of Natural Resources to issue air pollution control permits for new, modified and existing sources. The criteria for issuance of these permits vary depending on whether the source is major or minor and whether the source is locating in or affecting significantly an attainment or nonattainment area. The criteria for sources requiring a permit are set forth in Section NR 154.04, Wisconsin Administrative Code. Therefore, sources subject to these criteria or notice of intent requirements must obtain a permit prior to start of construction (or modification) and operation.

Before a permit can be issued, subject sources are to be reviewed for the air pollution control technology proposed to be installed and for their impact upon the air quality. This is to insure compliance with all applicable rules and statutory requirements. The plan review will show why the source(s) should be approved, conditionally approved, or disapproved. It will encompass emission calculations and air quality analysis using U.S. EPA models, if applicable. Emissions from volatile organic compound (VOC) sources and small sources whose emissions are known to be insignificant are normally not modelled. As a precautionary note, the emission estimates are based on U.S. EPA emission factors (AP-42) or theoretical data and can vary from actual stack test data, which are often times lower than the estimates. In addition, the U.S. EPA diffusion model(s) used in applicable cases gives conservative estimates of the incremental contribution from the source(s) subject to review.

TYPE OF PERMIT

Permit to construct and operate a Kelly model 380 pyrolytic incinerator system capable of burning liquid and solid wastes and equipped with a Cain air to air heat recovery system.

Owner/Operator: Commerce Industrial Chemicals Inc.

5611 West Woolworth Ave. Milwaukee, WI 53209

Contact/Authorized Representative: Mr. Donald Michalski

President (414) 353-3630

Submitted By: Russell C. Meyer

Paul Reilly Company, Inc. 3035 West Vera Avenue Milwaukee, WI 53209

SOURCE DESCRIPTION

This new source of air contaminants is a Kelly model 380 pyrolytic incineration system. This system has been modified to also burn liquid wastes (aromatic hydrocarbons, aliphatic hydrocarbons, ketones and

esters) and has been equipped with a Cain air to air heat exchanger. The waste incinerated in this system will be a combination of type "0" waste and the liquid waste solvents. The maximum feed rate for this system is 375# of Type "0" waste per hour. Natural gas is used as the primary fuel for this incinerator.

Stack parameters after the heat recovery system are as follows:

Exhaust temperature = 400°F Stack Height = 27'10" Exhaust flow rate = 1024 acfm @ 5.6% CO₂

The operating schedule for this system will be 8 hours per day, 5 days per week, 52 weeks per year.

SITE DESCRIPTION

The Commerce Industrial Chemical Plant is located in an attainment area for particulates and a nonattainment area for ozone. A nonattainment area for particulates exists approximately 7.25 km away.

APPLICABLE LIMITATION

Pollutant	Applicable Wisconsin Administrative Code	Limitation
Particulate Matter	Sec. NR 154.11(5)(a)1.c.	0.30 $\#/1000$ $\#$ exhaust gas corrected to 12% $^{\rm CO}_2$
Visible Emissions	Sec. NR 154.11(6)(a)1.	#1 of the Ringlemann Chart or 20% opacity

CONTROL TECHNOLOGY REVIEW

This incineration system will have no equipment to control emissions. Instead, wastes will be converted to combustible gases in the pyrolytic chamber then ignited in a thermal reactor which will be maintained at temperatures in excess of 1800°F to ensure complete incineration. The pyrolytic chamber and the thermal reactor are equipped with natural gas-fired burners which will automatically turn on when the burning wastes do not maintain sufficient temperatures.

EMISSION SUMMARY

	Allowable			Act	Actual			Potential		
Pollutant	#/1000 # exhaust gas	#/hr	TPY	#/1000 # exhaust gas	#/hr	TPY	#/1000 # exhaust gas	#/hr	ТРУ	
PM SO NO ^X CO ^X	0.30	0.36	1.58	0.07		0.09 0:10* 0.65	0.21	0.27 0.28 1.88	1.18 1.24 8.20	
со ^х нс	negligible negligible					•				

^{*}These numbers were incorrectly listed as 0.94 and 0.98 in the original review.

Hazardous Emissions: There will be no hazardous emissions as none of the wastes to be burned contain hazardous components.

AIR QUALITY REVIEW

The purpose of the air quality review is to determine whether or not the allowable emissions from this proposed pyrolytic incineration system will cause or contribute to a violation of the particulates national ambient air quality standards (NAAQS). A screening analysis was performed using a U.S. EPA reference model (PTMAX). (See the Appendix.)

The predicted maximum 24 hour concentration at stability 4 of 5 m/sec wind is 2.88 ug/m 0 .183 km. If the input is <5 ug/m , it is considered insignificant. The nearest particulate monitor is approximately 3.2 km distance at 5100 North 91st Street. The second highest particulate concentration during 1980 recorded at this monitor was 105 ug/m 3. If the maximum 24 hour concentration due to this source could sustain itself so as to impact on the air near the monitor, which is highly unlikely, it should not jeopardize the 150 ug/m 3NAAQS.

OTHER IMPACTS

No adverse impact upon soil or vegetation due to this source is expected.

DETERMINATION

The Bureau of Air Management, Wisconsin Department of Natural Resources has reviewed the materials submitted by Paul Reilly Company on behalf of Continental Can Company of Milwaukee for their Kelly model 380 pyrolytic incineration system equipped with an air to air heat recovery and has made a preliminary determination that:

- 1) The source can comply with all applicable rules and regulations.
- The NAAQS shall not be jeopardized by the operation of this facility.

Therefore, preliminary or tentative approval is granted for this project, subject to the following conditions:

- 1) Only wastes for which the incinerator has been designed for shall be disposed of through the unit. Manufacturer's recommendations shall be strictly observed.
- 2) Only properly trained operators shall be allowed to operate the incinerator. Manufacturer's operating and maintenance instructions shall be followed at all times. These instructions shall be visibly posted in the vicinity of the incinerator.

The incinerator shall be operated and maintained in a clean and 3) pollution-free manner.

Review Engineer: William Haas Checked By:

Approved By:

cc: Southeast District Air Program

BEFORE THE DEPARTMENT OF NATURAL RESOURCES BUREAU OF AIR MANAGEMENT

Wisconsin Department of Natural Resources)
Air Pollution Control Permit to Construct) MIA-12-SJK-82-41-011
an Air Contaminant Source at Milwaukee,)
Milwaukee County, Wisconsin)

Commerce Industrial Chemicals Inc., 5611 W. Woolworth Ave., Milwaukee, Wisconsin has submitted to the Department of Natural Resources (DNR) a permit application including plans and specifications for a pyrolytic incinerator for burning liquid and solid wastes equipped with an air to air heat exchanger. The Bureau of Air Management of the Department has analyzed these materials and has preliminarily determined that the project should meet applicable criteria for permit approval as stated in Wisconsin Statutes 144.393, including both the emission limits and the ambient air standards and should, therefore, be approved. In addition, the Department has made a preliminary determination that an Environmental Impact Statement will not be required before approving this proposal. This tentative approval does not constitute approval from other DNR sections which may also require a review of the project.

The DNR hereby solicits written comments from the public regarding the proposed incinerator equipped with a heat exchanger. These comments will be considered in the DNR's final decision regarding this project. Information, including plans, and the DNR's preliminary analysis regarding this proposal are available for public inspection at the Department of Natural Resources Headquarters, GEF II Building, Third Floor, 101 S. Webster Street, Madison, Wisconsin and at the Southeast District Office, 1011 Mayfair Road, P.O. Box 13248, Milwaukee, Wisconsin 53213.

Interested persons wishing to comment on the proposal and preliminary determination should submit written comments within 30 days to:

Wisconsin Department of Natural Resources Bureau of Air Management, Southeast District Office 1011 Mayfair Road P.O. Box 13248 Milwaukee, WI 53213

Attn: Mr. William Haas

A public hearing may be requested by individuals if the project is of significant concern to them. The request for hearing should indicate the interest of the party filling the request and reasons why a hearing



Paul Reilly Company, Inc.

3035 WEST VERA AVENUE

MILWAUKEE, WI 53209

(414) 352-3400

GREEN BAY, WI 54304 3135 South Gross Avenue P. O. Box 72 (414) 499-0679

EAU CLAIRE, WI 54701 (715) 835-1937

ROCKFORD, IL 61130 7811 North Alpine Street (815) 654-0380

January 6, 1982

The Common Council City of Milwaukee 200 E. Wells St. Room 205 Milwaukee, WI 53202

Gentlemen,

Please find enclosed a copy of the submittal which we made to the Department of Natural Resources requesting licensing and permission to install a Kelley Model Batch 380 incinerator and air-to-air recovery system at the Commercial Industrial Chemicals Company at 5611 W. Woolworth Ave., Milwaukee, Wisconsin. You will note in the copy of the letter from the Department of Natural Resources that we are required by law under Chapter 221, known as the budget review bill, which became effective April 30, 1980, to submit to the main library and the clerk of any city, county, or village having jurisdiction over the installation, a copy of the submittal to the Department of Natural Resources.

Would you please see that the copies of the submittals which I am forwarding to you are kept on file should anyone from the public want to review this information. Your cooperation in this matter is greatly appreciated.

Sincerely,

PAUL REILLY COMPANY

Enclosure

RCM/sq

Attachment #7

ERCE Industrial Chemica

5611 W. WOOLWORTH AVE. MILWAUKEE, WIS. 53218



PHONE: (414) 353-3630

"A Solvent For Every Purpose"

March 6, 1984

Common Council City Clerk 200 E. Wells St. Milwaukee, WI 53202

Dear Sir:

We are currently applying to the Wis. DNR and the US EPA for license to operate a hazardous waste storage facility located at 5611 W. Woolworth Ave. in the city of Milwaukee, Milwaukee County.

State Statute 144.445 requires us to apply to you for any applicable local approvals.

Under State Statute 144.44 (1) DEFINITIONS, section (1m)(b) states: "Within 15 days after the receipt of a request from the applicant, a municipality shall specify all local approvals for which applications are required; or issue a statement that there are no applicable local approvals."

Therefore, please inform us of any approvals required, or issue a statement that there are no applicable approvals and that you then waive the 120 day time period.

Thank, you for your attention in this matter.

Your/s very truly,

L. Pedersen

HLP:me

copies: Wis. DNR Mr. Jim Schmidt

Wis. DNR Mr. Rajen Vakharia

COMMERCE Industrial Chemicals Inc.

5611 W. WOOLWORTH AVE. MILWAUKEE, WIS. 53218



"A Solvent For Every Purpose"

35AR 8 1984

PHONE: (414) 353-3630

March 6, 1984

County Clerk 901 N. 9th St. Milwaukee, WI 53233

Dear Sir:

We are currently applying to the Wis. DNR and the US EPA for license to operate a hazardous waste storage facility located at 5611 W. Woolworth Ave. in the city of Milwaukee, Milwaukee County.

State Statute 144.445 requires us to apply to you for any applicable local approvals.

Under State Statute 144.44 (1) DEFINITIONS, section (lm)(b) states: "Within 15 days after the receipt of a request from the applicant, a municipality shall specify all local approvals for which applications are required, or issue a statement that there are no applicable local approvals."

Therefore, please inform us of any approvals required, or issue a statement that there are no applicable approvals and that you then waive the 120 day time period.

Thank you for your attention in this matter.

Yours very truly,

Harriet L. Pedersen

HLP:me

copies: Wis. DNR Mr. Jim Schmidt

Wis. DNR Mr. Rajen Vakharia



DEPARTMENT OF PUBLIC WORKS

GERALD SCHWERM • Director
ERNEST VOGEL • Deputy

Milwaukee County

PROFESSIONAL SERVICES DIVISION

March 30, 1984

Harriet L. Pedersen Commerce Industrial Chemicals, Inc. 5611 W. Woolworth Avenue Milwaukee, WI 53218

Subject: County Board File No. 84-200

At its meeting on March 27, 1984, the Milwaukee County Board Committee on Energy, Environment and Extension Education received your letter request of March 6, 1984 relative to the need for local approvals for a hazardous waste storage facility at the above address. The Committee recommended placing this matter on file and directed that I advise you that no Milwaukee County permits or approvals for the facility are required.

Yours very truly,

Fred R. Rehm

Director of Engineering, Environmental

and Energy Services

FRR: ra

cc: M. Rauen



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny Secretary

BOX 7921 MADISON, WISCONSIN 53707

File Ref 4530

April 2, 1985

Ms. Harriet Peterson Commerce Industrial Chemicals 5611 West Woolworth Avenue Milwaukee, WI 53209

Re: Air Pollution Control Permit No. MIA-SJK-82-41-011

Dear Ms. Peterson:

Recently I have been involved with the Hazardous Waste Section of the Department of Natural Resources, Bureau of Solid Waste Management as they process your hazardous waste storage and incineration permit application. It has come to my attention that some materials which the hazardous waste permit would allow you to burn were not approved when the Bureau of Air Management issued an air pollution control permit (No. MIA-SJK-82-41-011) in 1982 for the Kelley incinerator at your facility. The air permit approval included Type O wastes (e.g., paper, wood, cardboard, etc.), and aromatic, aliphatic, ketone and ester hydrocarbon solvents. No wastes containing heavy metals or halogenated materials were approved.

The still bottom sludge analyses provided with your hazardous waste permit application indicate a significant heavy metal content. Additionally, the Type 2 wastes may come from industrial uses where heavy metals may be entrained. You have indicated during our telephone conversations on March 14th and 25th that Commerce Industrial Chemicals intends to burn only Type 1 wastes; these still bottom sludges and Type 2 wastes will not be burned.

I wish to remind you that if Commerce Industrial Chemicals intends to burn the still bottom sludges, Type 2 wastes, or wastes not previously approved, a change in the air pollution control permit for the incinerator may be required under Section NR 154.04, Wisconsin Administrative Code.

Should you have any qustions on this matter, please write or contact me at 608/267-7540.

Sincerely, Bureau of Air Management

Steven Klafka, Environmental Engineer Engineering and Surveillance Section

cc: E Lynch - SW/3

W. Klassen - SED

is warranted. The Department may then hold a public hearing if it determines that there is a significant public interest in holding a hearing.

Dated at Madison, Wisconsin March 8, 1982

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

Donald F. Wheller, Director Bureau of Air Management

of Plants

Box Elder...Acer negundo Red Maple...Acer rubrum Silver Maple...Acer saccharinum Sugar Maple...Acer saccharum Bitternut Hickory...Carya cordiformis Shagbark Hickory...Carya ovata Gray Dogwood...Cornus racemosa Red-osier Dogwood...Cornus stolonifera Hawthorn...Crataegus Beech...Fagus grandifolia Red Ash...Fraxinus pensylvanica Apple...Malus pumila (Pyrus malus) Norway Spruce...Picea abies Red Pine...Pinus resinosa White Pine...Pinus strobus Cottonwood...Populus deltoides Quaking Aspen...Populus tremuloides Wild Plum...Prunus americana Wild Black Cherry...Prunus serotina Swamp White Oak...Quercus bicolor Bur Oak...Quercus macrocarpa Red Oak...Quercus rubra Black Locust...Robinia pseudo-acacia Sandbar Willow...Salix interior Basswood, American Linden...Tilia americana American Elm...Ulmus americana Slippery Elm...Ulmus rubra Smooth Sumac...Rhus glabra Early Wild Rose...Rosa blanda Wild Rose...Rosa virginiana Bramble...Rubus Curly Dock...Rumex crispus Green Foxtail...Setaria viridis False Solomon's Seal...Smilacina racemosa Bittersweet Nightshade...Solanum dulcamara Tall Goldenrod...Solidago altissima Grass-leaved Goldenrod...Solidago graminifolia Spiny Sow Thistle...Sonchus asper Common Dandelion...Taraxacum officianale Poison Ivy...Toxicodendron radicans Red Clover...Trifolium pratense Common Mullein...Verbascum thapsus Riverbank Grape...Vitis riparia

of Plants (cont.)

Yarrow, Milfoil...Achillea millefolium Quack Grass...Agropyron repens Slender Wheat Grass...Agropyron trachycaulum Redtop Bentgrass...Agrostis gigantea Common Ragweed...Ambrosia artemisiifolia Common Burdock...Arctium minus Common Milkweed...Asclepias syriaca Whorled Milkweed...Asclepias verticillata Heath Aster...Aster ericoides New England Aster... Aster novae-angliae Hairy Aster...Aster pilosus Arrow-leaved Aster...Aster saggittifolius Hungarian Brome ... Bromus inermis Lamb's Quarters...Chenopodium album Thistle...Circium Horseweed...Conyza canadensis Wild Carrot, Queen Anne's Lace...Daucus carota Crabgrass...Digitaria Wall Rocket...Diplotaxis muralis Wild Millet...Echinochloa pungens Wild Strawberry...Fragaria virginiana Squirrel-tail Grass...Hordeum jubatum Ivy-leaved Morning Glory... Ipomoea hederacea Burning Bush, Summer Cypress...Kochia scoparia Butter-and-Egg, Toad Flax...Linaria vulgaris Honeysuckle...Lonicera Common Mallow, Cheeses...Malva neglecta White Sweet Clover...Meliotus alba Yellow Sweet Clover...Meliotus officinalis Wild Bergamot...Monarda fistulosa Virginia Creeper...Parthenocissus quinquifolia Timothy...Phleum pracense Common Plantain...Plantago major Kentucky Blue Grass...Poa pratensis Yellow Coneflower.... Ratibida pinnata

of Wildlife

Birds

Night Hawk...Chordeiles minor minor Rose-breasted Grosbeak...Pheucticus ludovicianus White-breasted Nuthatch...Sitta carolinensis cookei Green Heron... Butorides virescens Solitary Sandpiper...Tringa solitaria Bobolink...Dolichonyx orizivorus Kingbird...Tyrannus tyrannus Fox Sparrow...Passerella iliaca Red-tailed Hawk...Buteo jamaicensis borealis Kildeer...Charadrius vociferus Brown Thrasher...Toxostoma rufum Ow1... sp.? Mourning Dove...Zenaidura macroura carolinensis Pheasant...Phasianus colchicus torquatus Hungarian Partridge...Perdix perdix perdix Finch... sp.? Warblers...Many species during migration Northern Flicker...Colaptes auratus luteus Yellow-bellied Sapsucker...Sphyrapicus varius varius Red-headed Woodpecker...Melanerpes erythrocepalus erythrocephalus Cowbird...Molothrus ater ater Mallard...Anas platyrhynchos platyrhynchos American Redstart...Setophaga ruticilla Fly Catcher ... sp.? Robin... Turdus migratorius migratorius Swamp Sparrow...Melospiza georgiana Indigo Bunting...Passerina cyanea Cedar Waxwing...Bombycilla cedrorum Bluejay...Cyanocitta cristata Black-capped Chickadee...Parus atricapillus atricapillus Red-winged Blackbird...Agelaius phoeniceus phoeniceus Bronzed Grackle...Quiscalus versicolor Crow...Corvus brachyrhynchos brachyrhynchos Slate-colored Junco...Junco hyemalis hyemalis

of Wildlife

(cont.)

<u>Mammals</u>

White-tailed Deer...Odocoileus virginianus borealis
Red Fox...Vulpes fulva fulva
Gray Squirrel...Sciurus carolinensis hypophaeus
Gray Chipmunk...Tamias striatus griseus
13-striped Ground Squirrel...Citellus tridecemlineatus
tridecemlineatus

Raccoon...Procyon lotor hirtus
Opossum...Didelphis marsupialis virginiana
Woodchuck...Marmota monax monax
Muskrat...Ondatra zibethicus zibethicus
Badger...Taxidea taxus jacksoni
Cottontail Rabbit...Sylvilagus floridanus mearnsii
Northern Plains Skunk...Mephitis mephitis hudsonica
Meadow Mouse...Microtus pennsylvanicus pennsylvanicus

Reptiles & Amphibians

Garter Snake...Eastern
Frog...Leopard...Rana pipiens
Spring Peeper...Hyla crucifer crucifer
Toad...Bufo americanus americanus
Gray Tree Frog...Hyla versicolor versicolor
or
Cope's Tree Frog...Hyla versicolor chrysocelis
Central Newt...Diemictylus viridescens louisianensis



THE UNIVERSITY OF WISCONSIN-MILWAUKEE/ P.O. Box 413, Milwaukee, Wisconsin 53201

COLLEGE OF LETTERS AND SCIENCE DEPARTMENT OF CHEMISTRY

PHONE: (414) 963-4411

4 April 1985

Senator Barbara L. Ulichny State Senator 4th District 140C South State Capitol P. O. Box 7882 Madison, Wisconsin 53707

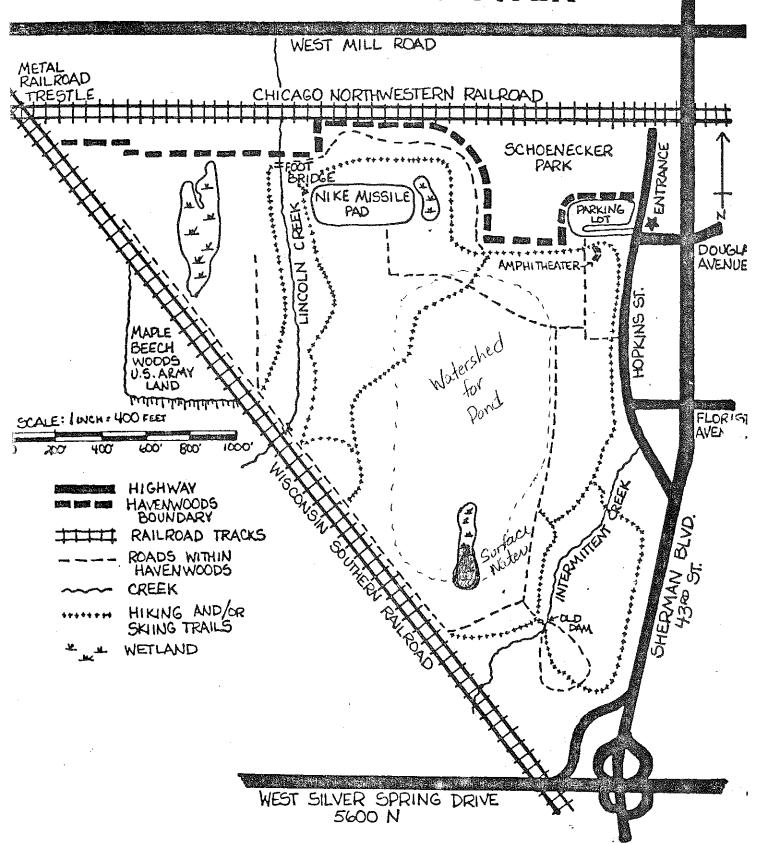
Dear Senator Ulichny:

We have completed our review of Commerce Industrial Chemical Corporation's application for an operating permit for a chemical incinerator at their facility on Woolworth Avenue. Three of us from the UWM Department of Chemistry reviewed the application document submitted to the U.S. EPA and Wisconsin DNR. In addition we visited with the company president, Mr. Don Michalski and Ms. Harriet Pedersen, who prepared the license application. Our UWM group included Dr. David Petering, a biochemist with interest in toxicology; Dr. Frank Shaw, an inorganic chemist with interest in metal toxicity; and me. My expertise is in bioorganic chemistry. We chose these members of our department because we covered each area of chemical interest and because we were interested in the problem of toxic waste disposal. I can assure you that none of us have any economic interest in the Commerce Industrial Chemical Corp. nor were we familiar with the company before your request for our review.

Before getting into the specifics let me summarize some general observations concerning waste disposal. There are two safe methods of dealing with organic chemical waste — reclamation and incineration. Both of these methods have inherent risks but these are manageable. The risks associated with burial of organic wastes are unacceptable since there is no way to assure that waste will not enter the ground water. The risks associated with reclamation concern disposal of the still bottoms; if these are organic they can be incinerated, if inorganic they can be solidified and buried. The risks of incineration of organic waste include emissions of toxic inorganic contaminants and the production of toxic dioxins from incineration of chlorinated hydrocarbons. If these two contaminants are avoided, the emissions from high temperature incineration are safer than those from automobiles.

Now we would like to make specific remarks regarding the application of Commerce Industrial Chemical Corp. for an incinerator permit. We found that the written material submitted by the company was quite complete and that the concerns raised by the EPA and DNR were carefully considered and answered by the company. In meeting with Mr. Michalski and Ms. Pedersen, we are impressed by their cooperativeness and thoughtfulness in dealing with the questions raised by DNR and EPA. In addition to its waste disposal initiative, the company has also embarked on a careful labelling program for its products; this represents a real improvement in labelling of industrial chemicals. We mention the latter program because it is indicative of the high level of responsibility in the company. The people at Commerce Chemical have the notion that the disposal of chemical waste

HAVENWOODS ENVIRONMENTAL AWARENESS CENTER



Senator Barbara L. Ulichny State Senator, 4th District 4 April 1985 Page Two

must be a concern shared between their company which distributes solvents to Wisconsin companies and their customers. We see something positive developing here as Commerce interacts with its customers to assure responsible handling of waste generated from Commerce solvents. This is a real accomplishment since several years ago organic wastes were disposed of haphazardly and most companies did not understand the issues involved.

We also found that the legitimate concern for safety of the residents of the area in which Commerce is located is being represented by EPA and DNR. These two bodies which regulate waste disposal have dealt with all of the safety issues which occur to us. It is our understanding that Commerce, DNR and EPA have agreed that chlorinated hydrocarbons will not be incinerated - eliminating any dioxin hazard. Commerce has analytical facilities which can identify chlorinated hydrocarbon waste; this equipment has been updated at the request of EPA and DNR. Furthermore, Commerce has agreed in consultation with EPA and DNR to install a carbon monoxide-IR monitor in the incinerator; this will assure proper incineration conditions and prevent incomplete combustion. It is also our understanding that waste will be analyzed offsite for heavy metals; this suggestion came from EPA and we believe that it is a good idea. It is clear from the "Zapata" burn on a similar incinerator that chromate or lead pigments could be a hazard if incinerated. The spot checking of waste for heavy metals and Commerce's careful waste analysis profile in consultation with customers should eliminate the risk of toxic metal emission. Finally, it is our understanding that a dike is being proposed for the waste storage area in order to contain spills. In summary, we find that Commerce is a responsible corporation and that the State and Federal agencies are being extremely careful in their oversight of the corporation. If any errors have been made they appear to us to be on the side of caution.

Perhaps a comparison will put this incinerator in a different light. Commerce Industrial Chemical Corporation proposes to store and incinerate a small amount of hydrocarbon waste. The hydrocarbons are similar to gasoline in many ways and the amounts that are being considered are smaller than gasoline volumes in a "filling" station. From the analytical data on the Zapata burn, the incinerator at Commerce burns much cleaner than an automobile. No human endeavor is risk free, but the incineration of the small amount of hydrocarbon waste at Commerce is no more dangerous than the operation of a typical gasoline filling station.

Sincerely yours,

James T. McFarland

for I III Teland

Professor and Chairman Department of Chemistry

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3. Additional information submittals and correspondence received between January 6, 1982 and September 28, 1984, which constitute the complete feasibility report for storage and treatment.

Related Documents and Information:

- 1. A Final Environmental Assessment prepared by the Bureau of Solid Waste Management which recommended that an Environmental Impact Statement not be required for the facility. This decision was made final by the Department on May 1, 1985.
- 2. The Feasibility Report was determined to be complete and a public notice to this effect was issued on October 11, 1984.
 - The U.S. EPA draft Part B RCRA permit.

FACILITY SITE DESCRIPTION

Commerce Industrial Chemicals, Inc. (CIC) is located at 5611 West Woolworth Avenue in the northwest part of the City of Milwaukee. The facility consists of a 45,000 square foot brick and concrete block warehouse building with an attached office of 2,700 square feet. CIC is a chemical distribution company supplying materials to companies located in their service area. CIC may currently store up to 40,000 gallons of hazardous waste on-site under interim status. The feasibility report proposes the use of the existing hazardous waste storage area. This area measures 65×22 feet for a total storage area of 1,430 square feet. It is located in the warehouse building. The maximum amount of waste proposed for storage in this area would be 396-55 gallon drums of hazardous waste. The area will be equipped with a secondary containment system.

A 118 gallon tank will be used to feed waste into the incinerator. This tank is an integral part of the incineration feed system and the incinerator. It is made by the incinerator manufacturer. The tank will be filled one drum at a time using a manual transfer pump. An overflow return line will be connected from the tank to the drum to prevent overfilling.

The incinerator unit is a Kelly Company Model 380B incinerator with a Kelly Liquifier waste feed injection system. It is located on a concrete pad adjacent to the warehouse. Trial burn data submitted in lieu of an actual trial burn indicates the unit is capable of burning hazardous waste in compliance with the performance standards of Chapter NR 181.45. The incinerator will operate at a waste feed rate of 15 gallons per hour \pm 10%.

Land Use Zoning:

The storage area and incinerator are located on Commerce Industrial Chemical property in an area of Milwaukee zoned for industrial use. The property within one mile of the site is zoned industrial, local business and residential. Land use in the area is manufacturing, commercial, residential and recreational. Other industrial properties in the immediate area include: Simplicity, Acme Printing Inks and Color Corporation of America. Two active railroad corridors intersect adjacent to the CIC

DETERMINATION OF FEASIBILITY FOR AN EXISTING STORAGE AND PROPOSED INCINERATION FACILITY FINDING OF FACT

General Facility Information

Name of Facility:

Commerce Industrial Chemicals, Inc. (CIC)

Authorized Contacts:

Donald Michalski - President

Harriet Pedersen - Corporate Secretary

Facility Location:

5611 West Woolworth Avenue

Milwaukee, Wisconsin

Township 8 North, Range 21 East, Section 26

Total Storage Area:

1,430 square feet

Total Storage Capacity: 21,898 gallons (396-55 gallon drums)

(1-118 gallon incinerator feed

tank)

Incinerator Waste

Feed Rate:

15 gallons per hour ± 10%

Service Area:

Eastern Wisconsin, from Brown County (Green Bay) south to the Wisconsin-Illinois border and from Milwaukee East to Dane County (Madison).

Waste Types and Characteristics:

Hazardous wastes stored on-site are broken into three waste types. Type I wastes are ignitable and spent non-halogenated solvents. Type II wastes are spent non-halogenated solvents. Type III wastes are spent halogenated solvents. A subgroup of Type I waste is Type Is. Type Is waste is ignitable waste with less than 100 parts per million (ppm) of the hazardous constituents as listed in Table VI, Chapter NR 181, Wisconsin Administrative Code.

Plan Submittals:

The information and material submitted for review of the proposed site consist of the following submittals. These submittals were all prepared by Commerce Industrial Chemicals.

- Initial Feasibility Report for Hazardous Waste Incineration, November 24, 1981.
- Resource Conservation and Recovery Act (RCRA) Part B Permit Application of Commerce Industrial Chemicals, Inc., February 16, 1983.

If you believe you have a right to challenge this decision, you should know that Wisconsin statutes and administrative codes establish time periods within which requests to review Departmental decisions must be filed. For judicial review of a decision pursuant to ss. 227.15 and 227.16, Stats., you have 30 days after service of the decision to file your petition for review. The respondent in action for judicial review is the Department of Natural Resources. You may wish to seek legal counsel to determine your specific legal rights to challenge a decision. This notice is provided pursuant to s. 227.11(2), Stats.

Should you have any questions regarding this determination, feel free to contact Victor Pappas at (414) 562-9640 or Edward Lynch at (608) 266-3084.

Sincerely,

Ronald W. Kazmierczak

Assistant District Director

jc

Enc.

c: Systems Management Section - SW/3 Hazardous Waste Section - SW/3 Linda Wymore - LEG/5 Arthur Glor - SED City of Milwaukee Northwest Community Alliance



State of Wisconsin

P.O. Box 12436 Milwaukee, WI 53212

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny Secretary

May 6, 1985

File Ref: 4430

Mr. Donald Michalski, President Commerce Industrial Chemical, Inc. 5611 W. Woolworth Ave. Milwaukee, WI 53202

Dear Mr. Michalski:

RE: Feasibility Report Determination, Commerce Industrial Chemicals, Inc., WID 980795181

The Wisconsin Department of Natural Resources has completed its review of a Feasibility Report for the existing hazardous waste storage facility and the proposed hazardous waste incinerator located at 5611 W. Woolworth Ave., Milwaukee, Wisconsin, EPA ID #WID 980795181. The report was prepared by Harriet Pedersen of Commerce Industrial Chemicals, Inc.

Based on this review, the Department has determined that your existing hazardous waste storage facility and proposed incineration facility are feasible and should provide for satisfactory storage and incineration of hazardous waste. This feasibility report approval is subject to compliance with State Statutes, Chapter NR 181, Wisconsin Administrative Code, and the conditions listed in the attached feasibility determination. The Department of Natural Resources reserves the right to require additional feasibility report information for the facility should conditions arise making it necessary. In addition, the Department has determined that an Environmental Impact Statement is not needed for this facility.

Please review carefully the attached Determination of Feasibility to assess whether the report adequately sets forth the details in your feasibility report. Particular attention should be given to the minimum site design constraints outlined by our staff.

You must now submit a Plan of Operation which meets the conditions set forth in the feasibility report, the enclosed determination and the requirements of Chapter NR 181.42, 181.43, 181.45 and 181.46, Wis. Adm. Code. This favorable feasibility determination does not guarantee Plan of Operation approval nor licensure.

If a Plan of Operation is not submitted within two (2) years following this determination, a new feasibility report or an addendum to the existing report may have to be prepared for this site.

RCRA FACILITY REVIEW FOR SOLID WASTE MANAGEMENT UNITS

	FACILITY NAME: Commerce Industrial Chemicals
	LOCATION (CITY, STATE): WID 980 795 181
	DAGE OF THE DECITOR
	INSPECTOR(S): No inspection conducted. Form Filled out based on record / File
	TITLE(S): review and discussion with
FAC.	ILITY REPRESENTATIVES PRESENT: district staff.
1.	Based on a review of State records, describe any land disposal units that have ever had a State permit for managing municipal or industrial (non-hazardous) waste at this site. Summarize the information which is available to indicate whether the waste may contain hazardous constituents and whether the unit may be leaking.
	- Not Applicable -
2.	Based on a review of State records, describe any incinerators or other solid waste management units at this site (other than those treatment, storage and disposal units that have interim status) for which a State air pollution control permit has been issued. Summarize the information which is available to indicate whether the waste may contain hazardous constituents, and whether and whether the emissions from the unit may contain hazardous constituents.
	- Not Applicable - Note CIC has an air construction permit
	for a proposed hazardous wask incinerator. The incinerator
	will be regulated under 40CFR Part 264 \$270 as well as
	NK181. The incinerator has never been used.
3.	Based on a review of State records (including CERCLA 103(c) notifications, complaints from the public, etc.) describe any known, suspected or likely releases of hazardous constituents to the environment from solid waste management units, except those spills not related to a specific unit, which were properly reported and cleaned up.
	The only reported complaint was of a white powder on the
	shipping dock. Investigation by the health department
	revealed it to be calcium carbonate, a non hazardous raw
	product.

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constituents. Summarize the information hazardous constituents may be escaping to constructed or managed injection wells.	which is available to indicate the environment through improp	hazaı wheth erly
- Not applicable -		
app man 2		
Did you soo any of the following arithus		-
Did you see any of the following solid wa prior existance of such a unit at the fac	ste management units or evidenc	e of
WASTES UNITS CURRENTLY SHOWN IN THE PART	B APPLICATION	AZAKL
	YES NO	
° Landfill	X X X X X X X X X X X X X	
° Surface Impoundment	X	
Land Farm	X	
waste Prie	X_	
incinerator	X	
° Storage Tank (Above Ground) ° Storage Tank (Underground)	X	
Container Storage Area		
° Injection Wells	<u>X</u> _	
 Wastewater Treatment Units 		
° Transfer Stations		
Waste Recycling Operations		
Waste Treatment, Detoxification		
° Other		
T.C. 4 has a second sec		
If there are "Yes" answers to any of the	items in Number 5 above, please	
provide a description of the wastes that	were stored, treated or dispose	d .
of in each unit. In particular, please for would be considered as hazardous wastes o	r bazardous constituents under	es es
Also include any available data on quanti	ties or volume of wastes disnos	runa. Pa
of and the dates of disposal. Please als	o provide a description of each	Çu
unit and include capacity, dimensions, lo	cation at facility, provide a s	ite
plan if avalable. You may simply referen	ce the owner or operator's "Cer	tifi-
cation Regarding Potential Releases from :	Solid Waste Management Units" i	f the
description contained therein appears to	oe accurate.	
114-12/2011		
-not applicable		
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	its other than those describe	ed above, what is kr	nown about them?
	Not Applicable		
may be a	e other information about exict this facility that should be continuing release of hazar aste mangement units.	e considered in dat	Arminian whatham +
·	ne - All relevant inform.	ation as existing	4
	cineration facility as incl		
		•	
/5 4	o indication of any price	or or existing spi	//s.
Edu	pard K Lynch P.E. Printed Name - State Permit		
lyped or	Printed Name - State Permit	Writer	
ED w	ndK Synch e - State Permit Writer		6/13/R<
Signatur	e - State Permit Writer		6/13/85 Date

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Form for RCRA Facility Management Strategy

I.	Facility Information
	Facility Name: Commerce Industrial Chemical
	EPA I.D. No.: WID 980 795 181
	Facility Address: 5611 W. Worlworth Ave
	Milwanker, Wisconsin 53018
	Facility Management Strategy Prepared By:
	Name: Richard E O'Hora
	Agency/Organization: Wisconsin DNR
	RCRA Regulated Units at Facility
	X Incinerator
	Land Fill
	Surface Impoundment
	Waste Pile
	Land Farming
	OUTLINE FOR DEVELOPING A FACILITY MANAGEMENT STRATEGY
Ĭ.e	Evaluation of Information Concerning Solid Waste Management Units and Prior or Continuing Releases (PA/SI) and Summary of Inspections at the Facility.
II.	Evaluation of Groundwater Data and Assessment of Need for Interim Status Corrective Action Order
III.	Evaluation of CERCIA Authority at Facility and Relationship with RCRA
IV.	Summary of Part B Application Review to Date, Problems, Issues, Actions Needed
٧.	Summary of Facility Status and Proposed actions (in order of priority) for Resolving Environmental Problems and Processing Part B Application

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I. Evaluation of Information Concerning Solid Waste Management Units and Prior or Continuing Releases (PA/SI)

The main purpose is to determine whether or not there have been or may have been prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units which would require corrective action under Section 3004U of the Hazardous and Solid Waste Act. The solid waste management units of concern are:

- a) Solid waste management units not currently regulated under RCRA
- b) Solid waste management units regulated under RCRA but not subject to groundwater monitoring requirements

The purpose of this review is to determine:

- a) Do such units exist?
- b) Have there been prior or continuing releases of hazardous wastes or hazardous constituents from such units?
- c) Have releases caused environmental contamination that would warrant corrective action?
- d) If the answers to questions no. 1, 2 and 3 above are not clear yes or no answers, what additional data, information or investigation is needed to make a clear yes or no answer?

This review has two main components. The first is a review of the questionnaire sent to the applicant re Solid Waste Management Units and prior or continuing releases of hazardous waste. The second part is a summary of inspections done at the facility and observations related to Solid Waste Management Units.

The attached flow charts show the key decision points for the two categories of solid waste management units.

- A. Review of Solid Waste Management Unit Questionnaire:
 - 1) Date questionnaire re Solid Waste Management Units was sent out 3/1/85
 - 2) Date response received 3/12/85 date signed by CIC 5/3/85 date rec'd by DNR
 3) Review of response indicates
 - a) Solid Waste Management Units exist (Other than RCRA regulated units)
 - b) No Solid Waste Management Units exist
 (Other than the RCRA regulated units shown on Part A and Part B application)
 - c) It is not clear from review of questionnaire whether or not any Solid Waste Management Units exist additional information and/or a site visit will be required

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4) If response	io No.3 above is	(a) then an	swer this c	West ion								
In regard to	prior or contin Constituents th	ne de la companya de										
a) Releases of Hazardous Wastes or constituents have occurred or are thought to have occurred												
b) Releases of Hazardous Wastes or constituents have not occurred												
c) It is not known whether releases of Hazardous Wastes or Hazardo												
5) For RCRA regu the response	lated units that to the question	t <u>do not have</u> naire indicat	groundwate ed	er monitoring	3							
a) Relea	ases of Hazardou Chought to have	s Wastes or occurred	constituent	s have occu:	red or							
<u></u> ★ b) Relea	ses of Hazardou	s Wastes or	constituent	s have not c	herrunX							
c) It is	not known whet	her releases	of Hazardo	us Wastes or	Hazardous							
6) Environmental			with prior cas:	or continuin	9							
mone a) Groun												
none b) Air												
mone c) Surface	e Waters											
none d) Soils												
) Environmental A as follows:	lonitoring Data	noted in No.	6 above ca	ın be summari	.zed							
DESCRIPTION	Groun	Į.		Surface								
	Water	Air	Soils	Water	+							
Hazardous Wast Constituents h been detected	es or ave			_	**************************************							
Environmental Standards have violated	been											

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8) Did the facility submit a 103(c) Notification under cancer.
a) Yes
* b) No
9) If the answer to No. 8 above is yes, did the facility list the same units on the Solid Waste Management Questionnaire as they did on the CERCLA 103(c) Notification Form?
a) Yes
b) No Not applicable
B. Summary of Inspection at Facility
1) During the inspection of this facility did the inspector note any evidence of past waste disposal practices not currently regulated under RCRA such as piles of waste or rubbish, ponds or surface impoundments that might contain waste, active or inactive landfills?
a) Yes, Explain
★ b) No
c) Cannot Respond to this Question
2) Was there any evidence of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituents?
a) Yes, Explain

c) Cannot Respond to this Question
3) Are there any tanks at the facility which are used for waste storage (solid or hazardous) which are located below grade and could possibly leak without being noticed by visual observation?
a) Yes
<u>*</u> b) No
c) Cannot Respond to this Question

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I concur with this statement do not concur with this statement for the following reasons
hi knowledge of Familian in the second
hi knowledge of Familian in the second
hi knowledge of Frailies in the second
hi knowledge of Parilian in an age
by knowledge of Facility is not sufficient for me to concur or non-concur with the information in the Solid Waste Manage
ment Unit Questionnaire.
if prior or continuing releases of hazardous wastes or it have occurred. Specify which units are of concern types of releases are suspected. (i.e., releases to er, surface water, air, soils, etc.)
tes of Inspections RCRA
Name Name (1/4) 5/2 22/2 1/5/2 5/4
Name Vic Pappas (414) 562-9460 Jim Schmidt Signature
t

Items B. I thru 4 were discussed with him on 6/11/85 via phase conversation.

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6)	An on-site i pection to discuss and evaluate the possibility of prior or continuing releases form Solid Waste Management Units is recommended
	a) Yes
	<u>★</u> b) No
II.	Evaluation of Groundwater Data and Assessment of Need for Interim Status Corrective Action Order
	 A review of Interim Status Groundwater Data, Groundwater Data included in the Part B application and information concerning Solid Waste Management Units and prior or continuing releases indicates:
	a) There is groundwater contamination that is caused by a RCRA regulated unit or a Solid Waste Management Unit
	There is no indication of groundwater contamination caused to RCRA regulated units or Solid Waste Management Units
	c) Information available is insufficient to conclusively determed the presence or absence of groundwater contamination
	2) If (a) or (c) above is checked, please address these questions regarding affected aquifers and water supply wells in the vicinity of the facility not applicable
	a) Aguifers that have or may have contamination are used as a c water source and withdrawal wells are located within 2500 f of regulated units
	b) Aquifers that have or may have contamination are used as a drinking water source ad withdrawal wells are located more 2500 ft. from regulated units. Approximate distance is
	c) Aquifers that have or may have contamination are not used drinking water source within a 2 mile radius of facility.
	3) For water supply wells that may have groundwater contamination please indicate: not applicable
	a) Water samples have been analyzed and groundwater conamina 400 has been confirmed.
	b) Water samples have been taken and no contamination is indicate
	c) No sampling and analysis has been done on water supply well

	4)	īss	uance	of a RCRA permit to this f	acility is likely to take:
			Time		Mo/Yr
		a)	0-6	months	within 6 months
		(ď	6-12	months	· · · · · · · · · · · · · · · · · · ·
		c)	12-1	8 months	
		đ)	more	than 18 months	
	5)	abo	ve in	ing the information provide dicate your evaluation of t ve action order:	d in Items No. 1, 2, 3, and 4 he need for an interim status
	-		_ a)	hazard and the time require corrective action should be	eard or potential for a significant red to issue the RCRA permit, begin immediately through the use ective action order (summarize
	-	\	_ b)	RCRA permit will be issued	does not appear to exist or since the shortly, there does not appear to be status corrective action order
	-	10 - CH L	_ c)	conclusions of (a) or (b) water wells are utilized i facility (2500 ft. or less issued to expedite the gat	ation is not sufficient to reach the above; however, because drinking in the immediate vicinity of the s) an enforcement action should be thering of appropriate data for items information needed below)
\	irana M. Wina a da a		10 1n	dications of post lea	ks.
<u> </u>					
III.					lity and Relationship with RCRA
<u></u>	1)	Did			notification form under CERCLA?
	-	, ,	a)	Yes	• ·
		<u> </u>	(d	No	

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			. *
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2)		answer to No.1 is No. should this facility have submitted a notification form under CERCLA?
	a)	Yes
,	<u>*</u> ы	No
3)	Has a C	ERCLA Preliminary Assessment/Site Investigation (PA/SI) been ed for this site?
	a)	Yes ·
	<u>*</u> b)	No
4)	the fine	RCLA PA/SI has been completed for this site summarize briefly dings focusing on environmental contamination, imminent and wastes found.
infiretana-economic lapato-moner		
5)	After re Part B a	eviewing the CERCLA Notification form, the RCRA Part A and applications it appears that: Not applicable The RCRA units and CERCLA units are one and the same
-	b)	The RCRA units and CERCLA units are clearly different units
٩	c)	There is overlap between the RCRA and CERCLA units some are th same and some are different
6)	This fac List (N	cility is (is not) included on the CERCLA National Priorities PL)
, _	<u>a</u>)	Yes, it is
_	<u>*</u> b)	No, it is not
7)	correct:	the information noted in Items No. 1, 2, 3 and 4 above and ent guidance from EPA-Headquarters on RCRA-CERCLA interface ive action for CERCLA units should be handled as follows Nof applicable Totally within the RCRA permit
-	b)	RCRA-CERCIA activities proceed simultaneously with ultimate CERCLA corrective action being written into RCRA permit as a compliance schedule
_	c)	CERCLA action alone

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Sum Nee	mary of Part B Application Review to Date, Problems, Issues, Actions ded
A.	Key Dates
	1) Date Part B Called 8/5/82
	2) Date Part B Received 2/17/83 by DNR
	3) Date First NUD Sent 3/4/83 by DNR
	4) Date First Revised Part B received 3/1/4 \$/6/83
	5) Date 2nd NOD Sent 9/22/83
	6) Date of Enforcement Actions for Deficient Part B
	7) Date 2nd Revised Part B Received
` . '	8) = Complete iess letter to EPA 1/26/84
	Q*.
	10)* Draft Permit to EPA 3/28/84
	* Fill in further processing/enforcement actions that have taken place
В.	
	Incinerators - Adequacy of Trial Burn Plan
	— Land Disposal Units - Adequacy of groundwater data and hydrogeological information required by 40 CFR 270.14(c)
	- Has facility "detected" or "measured" groundwater contamination?
	— Has the facility been required to submit a Corrective Action Plan per \$\$270.14(c)(8)?
	-none-
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	Nee A.

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en:	action the state has taken to resolve this deficiency (ADD, Enforcement Action, etc.) and the state's or applicant's schedule and methodology for resolving the deficiency.						
	-none -						
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ar	tstanding deficiencies plend what the projected dates tion Proposed	ase des are fo					
			Projected Date				
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	rojected dates for making a	- - - - a final					
		a final					
Pe	rojected dates for making a	a final	permit determination				
P:	rojected dates for making a	a final	permit determination Projected Date				

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Drait Permit Prepared	
Draft Permit Public Noticed	done
Public Hearing Held	done
Permit Issued/Denied	Projected within 4 months
V. Summary of Facility Status and Proposed for Resolving Environmental Problems	Actions (in order of priority)
 There is a critical situation or significant warrants some immediate action reasons below) 	
a) Issue an Interim Status cor	rective action order
b) Initiate a CERCLA immediate	e removal action
(D.A)	
2) There is possibly a critical situati facility but adequate data is not averaged gathering of additional data should	vailble to make a final judgement -
a) Issuing a compliance order or an information request u	under section 3008(h), 3013 of RCRA under 3007
b) Using CERCIA contractor	
c) Using EPA or State Personne	el to take samples and run analyses
3) Although there does not appear to be facility. There is groundwater con- require corrective action. Would in action prior to the RCRA permit being	tamination present that will to be advisable to begin corrective
a) Yes, it would. Issue an in	nterim status corrective action order
b) No, there is no need to be the RCRA permit being issue	gin corrective action prior to ed

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4) There does not appear to be a critical altuation or imminent hazard environmental problems will be handled as follows (state reasons be	
a) Normal processing of RCRA Part B application with compliant schedule for any corrective action needed including prior releases from Solid Waste Management Units	nce _.
b) Expedited Processing of RCRA Part B application with composite schedule for any corrective action neede including prior releases form Solid Waste Management Units	liance \
c) Normal processing of RCRA Part B application simultaneous with CERCLA remedial activities	lγ
	andresia materialis
	vez-rate
5) In regard to the status of the Part B application review, from Section III the following actions are needed to resolve outstanding Part B deficiencies. -no outstanding deficiencies, procede with permit issuance	3
permit issuance	 +

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Commerce Industrial Chemicals, Inc. WID 980795181
5611 West Woolworth
Milwaukee, Wisconsin

Facility Contact: Harriet Pedersen

414/353-3630

Permit Status: Draft permit at EPA since September, 1984

The draft permit covers a proposed incinerator and an existing storage area. The waste at the facility comes from generator clients who purchase raw products from CIC. The wastes consist of characteristic ignitable wastes (D001), spent non-halogenated solvents (F003), ignitable wastes with hazardous constituents (D001, F003), spend non-halogenated solvents (F005), solvent washes (K086) and spent halogenated solvents. Many of these wastes will be shipped off-site for solvent recovery, including all of the halogenated solvents. Only the characteristic ignitable and non-halogenated solvents will be incinerated. The storage area has a capacity of 21,898 gallons or 396-55 gallon drums and a single 118 gallon liquid waste feed tank. The incinerator waste capacity is 15 gallons per hour.

Summary of Corrective Action Review

The CIC Certification Regarding Releases from Solid Waste Management Units was received by the Bureau of Solid Waste from EPA on May 10, 1985. Review of that submittal and pertinent file information and records was conducted. District field staff were contacted.

Evaluation of the material indicated the presence of hazardous waste storage tanks on the facility as shown on the original Part A Application. Contact with district staff indicated they had no knowledge of these tanks and that they had never been noticed during any inspection. Furthermore, the location shown for the tanks is where a building has been located for the past several years. Contact with the facility revealed that this tank was an underground fuel oil tank used by a previous owner. It has not been used to store hazardous waste.

Recommendation

Review of available information indicates no past or continuing releases from any solid waste management units. Therefore, WDNR recommends that the RCRA permitting process be continued without interruption. There is no reason to request further information or implement any corrective action measure.

This is not an environmentally significant facility.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

RECEIVED WMD RCRA RECORD CENTER COMP

REPLY TO THE ATTENTION OF:

HRE-8J

April 21, 1993

Mr. Fredric Michalski Commerce Industrial Chemicals, Inc. 5611 Woolworth Avenue Milwaukee, Wisconsin 53218

Re: Visual Site Inspection

Commerce Industrial Chemicals, Inc.

Milwaukee, Wisconsin WID 980 795 181

Dear Mr. Michalski:

The U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Kevin M. Pierard, Chief

Minnesota/Ohio Technical Enforcement Section

RCRA Enforcement Branch

PRC Environmental Management, Inc. 233 North Michigan Avenue Suite 1621 Chicago, IL 60601 312-856-8700 Fax 312-938-0118



PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

COMMERCE INDUSTRIAL CHEMICALS, INC. MILWAUKEE, WISCONSIN WID 980 795 181

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Waste Programs Enforcement Washington, DC 20460

Work Assignment No. : R05032

EPA Region : 5

 Site No.
 WID 980 795 181

 Date Prepared
 March 16, 1993

 Contract No.
 68-W9-0006

 PRC No.
 309-R05032WI09

Prepared by : PRC Environmental Management, Inc.

(Ken Valder)

Contractor Project Manager : Shin Ahn
Telephone No. : (312) 856-8700
EPA Work Assignment Manager : Kevin Pierard

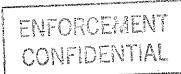
Telephone No. : (312) 886-4448

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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Commerce Industrial Chemicals, Inc. (CIC), facility in Milwaukee, Milwaukee County, Wisconsin. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs identified.

CIC is a distributor of liquid and solid virgin chemicals. Before September 1991, CIC collected drums containing various wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) from its customers. CIC transported drummed waste from customer facilities to the CIC facility, where it was staged in a Hazardous Waste Drum Storage Area. CIC stored the waste in the Hazardous Waste Drum Storage Area until enough drums of waste had accumulated for a full truckload to be shipped off site to treatment, storage, or disposal facilities (TSDF).

CIC began operations at the facility in October 1948, but hazardous waste collection and. storage activities did not begin until 1982. Waste collection and storage operations were recently stopped, and CIC plans to close the Hazardous Waste Drum Storage Area. After closure is completed, the facility will operate as a small-quantity generator of hazardous waste.

To meet customers' needs, CIC operates a quality control (QC) laboratory, where the goods that CIC distributes may be analyzed for various physical or chemical parameters. Waste solvents (D001, F002, F004, and F005) are generated in the QC laboratory and stored in a Laboratory Waste Accumulation Area. At one time, CIC was permitted to incinerate hazardous waste in a Hazardous Waste Incinerator. The incinerator was never operated, and it has been dismantled and removed from the facility.

The facility occupies about 2 acres in an area of mixed use. CIC has used the facility since October 1948 and employs 17 people. The facility is permitted as a storage facility. CIC is also permitted to transport hazardous waste.

During the PA/VSI, PRC did not identify any AOCs at the facility. PRC identified the following three SWMUs at the facility:

- 1. Hazardous Waste Drum Storage Area
- 2. Laboratory Waste Accumulation Area
- Hazardous Waste Incinerator

The potential for a release to occur from these SWMUs is low. No releases to any environmental media have been documented. The Hazardous Waste Drum Storage Area (SWMU 1) will be closed soon. The Laboratory Waste Accumulation Area never contains more than 5 gallons of waste. The Hazardous Waste Incinerator was never operated.

Residences are within 0.25 mile of the CIC facility, but access to the facility is restricted by locked doors when no one is on site. All hazardous waste is stored inside the facility. A ditch about 2,000 feet east of the CIC facility drains into Lincoln Creek, the Milwaukee River, and ultimately into Lake Michigan. Lake Michigan is the City of Milwaukee's primary drinking water source. At least one residence within 0.25 mile north of the facility uses ground water as a source of drinking water. This residence is not downgradient of the facility. Ground water is not a primary source of drinking water in the City of Milwaukee. Two isolated wetlands are more than I mile away from the facility. No other sensitive environments have been identified within 2 miles of the CIC facility.

PRC recommends that closure activities for the Hazardous Waste Drum Storage Area be initiated as soon as they are approved by WDNR.

RELEASED 4/1/12
RIN #
INITIALS LATE

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has
 usually exempted from standards applicable to hazardous waste
 management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Commerce Industrial Chemicals, Inc. (CIC), facility in Milwaukee, Wisconsin. The PA was completed on January 3, 1992. PRC gathered and reviewed information from Wisconsin Department of Natural Resources (WDNR) and from EPA Region 5 RCRA files. The VSI was conducted on January 8, 1992. It included interviews with a CIC facility representative and a walk-through inspection of the facility. PRC identified three SWMUs and no AOCs at the facility. Other information was gathered during the PA and after the VSI from the City of Milwaukee (Milwaukee), CIC, the Federal Emergency Management Agency (FEMA), the Rand McNally Corporation (Rand McNally), the Southeast Wisconsin Regional Planning Commission (SEWRPC), the U.S. Department of Agriculture

(USDA), the U.S. Department of Commerce (USDC), the U.S. Geological Survey (USGS), and the Wisconsin Geological and Natural History Survey (WGNHS).

The VSI is summarized and four inspection photographs are included in Attachment A. Field notes from the VSI are included in Attachment B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history; environmental setting; and receptors.

2.1 FACILITY LOCATION

The CIC facility is located at 5611 West Woolworth Avenue in Milwaukee, Milwaukee County, Wisconsin (latitude 87°58'57"N, longitude 43°07'57"W). Figure 1 shows the location of the facility in relation to the surrounding topographic features. The facility occupies about 2 acres in a mixed use area.

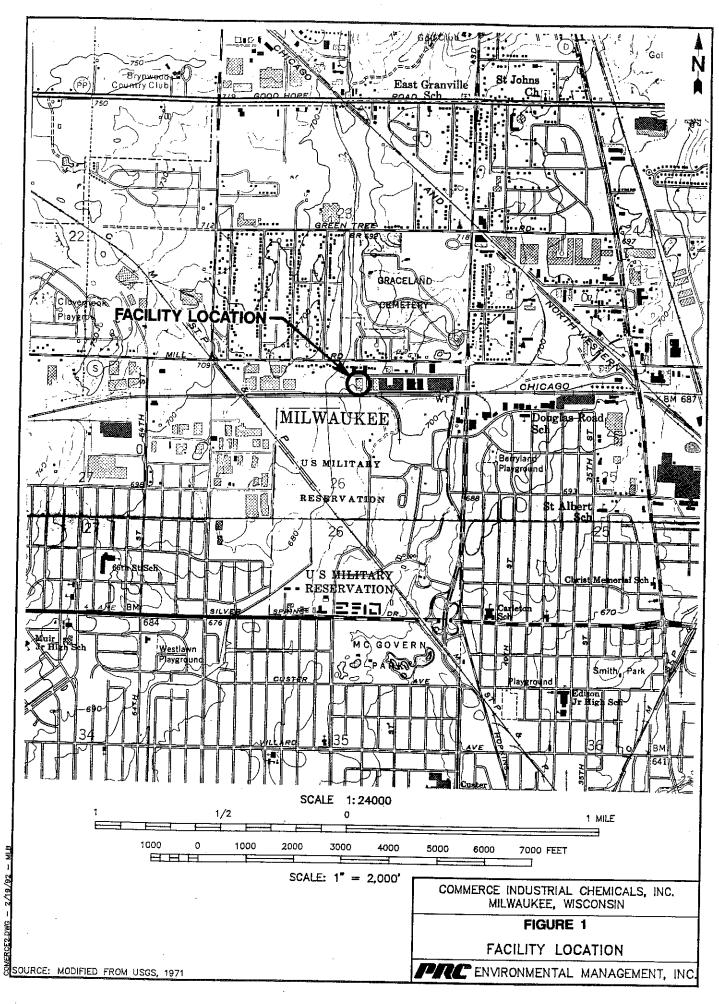
The CIC facility is bordered on the north by a telephone directory distributing facility and warehouse, on the west by an empty field and railroad tracks, and on the south by railroad tracks, Havenwoods Park, and a U.S. Army Reserve base. The facility is bordered on the east by warehouses and distribution centers.

2.2 FACILITY OPERATIONS

CIC is a distributor of liquid and solid virgin chemicals. Chemical goods distributed by CIC include solvents, esters, ketones, alcohols, amines, resins, pigments, and glycols. CIC also distributes containers and container liners. To meet customers' needs, CIC operates a quality control (QC) laboratory, where the goods that CIC distributes may be analyzed for various physical or chemical parameters. CIC does not manufacture or blend chemicals on site.

Prior to September 1991, CIC collected drums containing various wastes from its customers. CIC transported the drummed waste from customer facilities to the CIC facility, where it was staged in a drum storage area. CIC stored the waste in the drum storage area until enough drums of waste had accumulated for a full truckload to be shipped off site to treatment, storage, or disposal facilities (TSDF). CIC filed notification with WDNR on December 20, 1991, that it intends to stop its hazardous waste transport and storage operations as soon as closure activities are completed. After closure is complete, CIC will operate as a small-quantity generator of laboratory wastes.

The facility has operated at its current location since October 1948 (CIC, 1980b). CIC employs seventeen people at the facility, including two truck drivers. The facility consists of a 45,000-square-foot, brick and concrete warehouse and a 2,700-square-foot, brick office building



attached to the warehouse. The warehouse includes dry goods storage areas, a drummed material storage area, and the Hazardous Waste Drum Storage Area. The office building houses the QC laboratory and office space.

CIC's truck trailers are parked on the earthen lot on the east side of the facility. Prior to 1985, these trucks were fueled with gasoline from an underground storage tank (UST) beneath the earthen lot. The UST was closed in place in 1985, and no signs of release from the UST were noted by the contractors performing this work (Schaefer Brothers Building Company, 1985). No ground-water monitoring wells were installed as part of the closure activities.

2.3 WASTE GENERATING PROCESSES

CIC's QC laboratory generates spent laboratory solvents (D001, F002, F004, and F005). Spent solvent is accumulated in a 5-gallon pail in the QC laboratory (SWMU 2). In the past, CIC stored spent laboratory solvents in the Hazardous Waste Drum Storage Area before the waste stream was disposed of off site. When the Hazardous Waste Drum Storage Area is closed, CIC will store it on site for less than 90 days before it is disposed of off site. CIC does not generate any other solid wastes.

When the facility's Hazardous Waste Drum Storage Area was operational, it stored a variety of wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) generated off site. During the VSI, only two drums of waste material remained on site, and CIC intends to dispose of these drums off site as soon as the unit is closed.

The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

2.4 HISTORY OF DOCUMENTED RELEASES

No releases from SWMUs at the CIC facility have been documented. PRC did not observe any evidence of a release during the VSI.

2.5 REGULATORY HISTORY

CIC submitted a notification of hazardous waste activity to EPA on August 18, 1980 (CIC, 1980a). The facility submitted a RCRA Part A permit application on November 14, 1980 (CIC, 1980b). This application listed the following processes and wastes:

TABLE 1
SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste <u>Management Unit</u> ^a	Status
1	Hazardous Waste Drum Storage Area	Yes	Active; greater than 90-day storage of hazardous waste; facility intends to close unit
2	Laboratory Waste Accumulation Area	No	Active; satellite accumulation area
3	Hazardous Waste Incinerator	Yes	Inactive; never used; dismantled and removed from facility
·			

Note:

A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

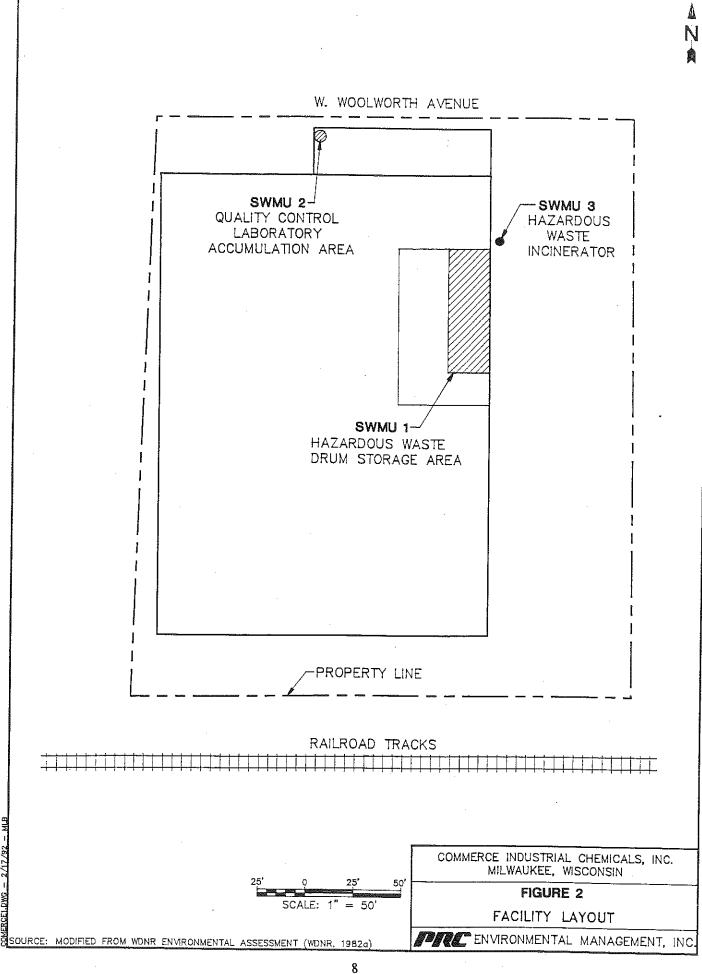


TABLE 2 SOLID WASTES

Waste/EPA Waste Code Drummed Waste/D001, F001, F002,	Source Off Site	Solid Waste Management Unit SWMU 1
F004, F005, F017, K078, K086, P100 Spent QC Laboratory Solvent/D001, F002, F004, F005	QC Laboratory	SWMU 2
		•

Process	Wastes
Container storage (S01) (40,000 gallons)	D001, F001, F002, F004, F005, and K078
Tank storage (S02) (6,000 gallons)	D001, F001, F002, F004, F005, K078, K086, and P100

EPA granted CIC interim status on June 21, 1982 (EPA, 1982a), and issued a formal request for submittal of CIC's Part B permit application on August 5, 1982 (EPA, 1982b). CIC applied for a Part B permit on February 9, 1983. On August 20, 1987, EPA issued CIC a permit to operate a hazardous waste storage facility (EPA, 1987).

In March 1987, CIC submitted to WDNR a plan of operation for a hazardous waste storage facility. On June 3, 1988, WDNR issued a plan of operation modification to CIC (WDNR, 1988b). On September 30, 1988, WDNR issued CIC a permit to operate a hazardous waste storage facility with a capacity of 396 55-gallon drums and a permit to operate a hazardous waste transport service. Since 1988, WDNR has renewed these permits. CIC submitted its latest renewal application to WDNR on September 23, 1991 (CIC, 1991).

CIC will close its hazardous waste storage facility as soon as closure activities are approved by WDNR. After the facility is closed, CIC will no longer transport hazardous waste.

WDNR has evaluated the CIC facility for compliance with RCRA on at least eight occasions. These evaluations include compliance evaluation inspections and record reviews. Based on records of these evaluations, the CIC facility was out of compliance on at least four occasions. CIC has achieved compliance on each of these occasions. The results of the evaluations are presented in Table 3.

CIC notified EPA and WDNR in November 1982 that it intended to operate a Hazardous Waste Incinerator (CIC, 1982a and 1982b). CIC's RCRA Part B permit application and WDNR Feasibility Report included the addition of the incinerator as a hazardous waste treatment unit. On May 18, 1982, WDNR issued CIC a permit to construct and operate the Hazardous Waste Incinerator (WDNR, 1982b). Although the City of Milwaukee and various citizens' coalitions opposed the proposed incinerator, EPA and WDNR granted the facility a license to treat wastes in the incinerator. CIC constructed, but never operated, the Hazardous Waste Incinerator due to cost concerns. The Hazardous Waste Incinerator has been dismantled and removed from the facility. WDNR has determined that the facility does not require an air permit for its current operations (WDNR, 1990b).

TABLE 3
FACILITY COMPLIANCE EVALUATIONS BY WDNR

Inspection Date	Areas of Noncompliance	Date Compliand Achieved
04/13/81	No waste analysis plan; no inspection schedule; no contingency plan; no operating record	01/27/83
01/27/83	None	NAª
08/14/85	None	NA
05/14/86	None	NA
06/02/88	No documentation of personnel training; inadequate manifest receipt procedures; failure to identify contents and mark dates on all containers entering storage; failure to maintain a complete operating record	08/09/88
05/30/90	None	NA
09/11/90	Inadequate contingency plan; inadequate emergency procedures plan; no documentation of personnel training; incorrect manifest receipt procedures; failure to maintain a complete operating record; failure to maintain adequate aisle space in storage area	11/09/90
03/27/91	Inadequate proof of financial responsibility	10/24/91

a NA = Not applicable

References: CIC, 1988a, 1988b, and 1990; EPA, 1981, 1988a, and 1988b; WDNR, 1981, 1983, 1985, 1986, 1988a, 1988c, 1990a, 1990c, 1991a, and 1991b.

CIC has applied for a storm water discharge permit for the facility, but WDNR has not yet issued the permit.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the CIC facility.

2.6.1 Climate

Milwaukee County is characterized by a continental climate with cold and snowy winters and warm summers. The average temperature in January is 20.7 degrees Fahrenheit (°F); the average temperature in July is 72.1°F. Prevailing winds in Milwaukee County are northwesterly in late autumn and winter, northeasterly in spring, and southwesterly in summer and early autumn. The average wind speed is between 10 and 14 miles per hour (USDA, 1971).

Total annual precipitation in Milwaukee County averages about 30.07 inches, with about 55 percent of the precipitation falling between May and September. The estimated mean annual lake evaporation in Milwaukee County is about 29 inches. Average seasonal snowfall is 42 inches (USDA, 1971). The maximum, 1-year, 24-hour rainfall in Milwaukee is between 2 and 2.5 inches (USDC, 1961).

2.6.2 Flood Plain and Surface Water

The CIC facility is not in any flood plain (FEMA, 1985). The surface water body nearest to the CIC facility is a ditch that borders the facility's western property line. USGS classifies the ditch as an intermittent water body that does not drain into another water body. Another ditch within 2,000 feet east of the facility forms the headwaters of Lincoln Creek. Lincoln Creek flows into the Milwaukee River about 6.5 stream miles downstream, southeast of the facility. The Milwaukee River discharges to Lake Michigan about 8 stream miles downstream of the confluence of Lincoln Creek and the Milwaukee River (USGS, 1971 and 1976). Lincoln Creek, the Milwaukee River, and Lake Michigan are used for recreational purposes. Lake Michigan also serves as a source of drinking water for the City of Milwaukee.

No wetlands have been identified along these waterways within 2 miles downstream of the facility. Two isolated wetlands are more than 1 mile east-northeast and north-northwest of the CIC facility (SEWRPC, 1989).

2.6.3 Geology and Soils

The CIC facility is in a level, developed area, and according to the USDA soil survey, the area around the facility has been filled with clayey material. The fill may also contain construction debris and loamy material. The land surface is probably compacted and absorbs little precipitation (USDA, 1971; USGS 1976).

Soils beneath the CIC facility overlay unsorted and unstratified, sedimental, end moraine deposits. These sediments were deposited during the Quaternary Period and are about 60 feet thick near the facility. Logs of wells drilled near the facility indicate that the Quaternary deposits include an upper stratum of clay about 40 to 60 feet thick above a lower stratum of sand and gravel ranging in thickness from 0 to 30 feet (USGS, 1973; WGNHS, 1992).

The Quaternary deposits are underlain by the dolomitic Milwaukee Formation deposited during the Devonian Period. The Milwaukee Formation is underlain by dolomites deposited during the Silurian Period. Together, dolomites in the Milwaukee Formation and the underlying Silurian formations are used locally as a source of drinking water and are called the Niagara Aquifer. The uppermost dolomite formation of the Niagara Aquifer is about 70 to 115 feet below ground surface near the CIC facility, and the aquifer is about 450 feet thick beneath the facility (USGS, 1973; WGNHS, 1992).

The Niagara Aquifer is underlain by the Maquoketa Shale Formation, deposited during the Ordovician Period. The Maquoketa Shale Formation acts as an aquitard between the Niagara Aquifer and lower aquifers. It is about 200 feet thick beneath the facility (USGS, 1973; WGNHS, 1992).

The Maquoketa Shale Formation is underlain by dolomites of the Galena-Platteville Formation and sandstones of the Saint Peter Formation and Prairie du Chien Group. These formations were deposited during the Ordovician Period and are underlain by Cambrian Period sandstones. Collectively, the dolomite and sandstone formations below the Maquoketa Shale Formation are called the Sandstone Aquifer. This aquifer may be used locally, but its use near the CIC facility has not been reported. The thickness of the Sandstone Aquifer beneath the facility is at least 775 feet, but the aquifer has not been drilled through (USGS, 1973; WGNHS, 1992).

Precambrian igneous and metamorphic rock underlie the Sandstone Aquifer. The rock formation is not known to be used as a water source within Milwaukee County (USGS, 1973).

2.6.4 Ground Water

While no site-specific information about ground water beneath the facility has been developed, a general study of water resources in Wisconsin's Lake Michigan basin is available (USGS, 1973). The water resources study, logs of wells drilled near the facility, and a list of active wells obtained from the City of Milwaukee's Water Works Department indicate that private wells within 0.25 mile of the facility draw water from the shallow sand and gravel stratum in the Quaternary deposits. Other private wells near the facility draw water from the Niagara Aquifer. Depending on local variations in the thickness of the upper clay stratum in the Quaternary deposits, water in the lower sand and gravel stratum and the Niagara Aquifer may be under artesian pressure. Generally, the depth to water near the facility is 35 feet below ground surface (City of Milwaukee, 1992; WGNHS, 1992).

Water in the sand and gravel Quaternary deposits flows east toward Lake Michigan. Wells drawing water from the sand and gravel deposits near the facility pump water at rates of 1.5 to 15 gallons per minute. Water in the deeper Niagara Aquifer flows generally east, but pumping from wells in Milwaukee County may affect the flow locally. Wells set in the Niagara Aquifer in the Lake Michigan basin have been reported to pump up to 1,200 gallons per minute (USGS, 1976; WGNHS, 1992)

2.7 RECEPTORS

The CIC facility occupies about 2 acres in a mixed use area in Milwaukee, Milwaukee County, Wisconsin. In 1990, Milwaukee had a population of about 628,088 persons (Rand McNally, 1992).

The CIC facility is bordered on the north by a telephone directory distributing facility and warehouse, on the west by an empty field and railroad tracks, and on the south by railroad tracks, Havenwoods Park, and a U.S. Army Reserve base. The facility is bordered on the east by warehouses and distribution centers. The nearest school, Douglas Street School, is slightly more than 1/2 mile east-southeast of the CIC facility. A residential area is within 0.25 mile north of the CIC facility. Facility access is controlled by a monitored entryway during working hours. The facility is locked when no one is there.

A ditch within 2,000 feet east of the facility forms the headwaters of Lincoln Creek. Lincoln Creek flows into the Milwaukee River, which eventually discharges into Lake Michigan about 15 stream miles from the CIC facility (USGS, 1971 and 1976). Lincoln Creek, the Milwaukee River, and Lake Michigan are all used for recreational purposes. Additionally, Lake Michigan is the

primary source of drinking water for the City of Milwaukee and other communities along the lake.

Ground water is used as a drinking water supply by several residences near the CIC facility. It is also used as an industrial supply several miles upgradient of the facility. The nearest active drinking water well is within 0.25 mile north of the facility on 56th Street. Ground water is not a primary source of drinking water in the City of Milwaukee (City of Milwaukee, 1992; WGNHS, 1992).

No on-site sensitive environments exist. Two isolated wetlands are more than 1 mile east-northeast and north-northwest of the CIC facility (SEWRPC, 1989). No other sensitive environments have been identified within 2 miles of the facility.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the three SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented release, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1

Hazardous Waste Drum Storage Area

Unit Description:

The Hazardous Waste Drum Storage Area is located in a room on the east side of the facility. Until September 1991, CIC collected drummed waste from its customers, brought the drums on site, and stored the waste in this unit until enough waste had accumulated for a full truckload to be shipped off site. Between 160 and 200, 55-gallon drums were usually stacked two high on pallets during storage, but CIC is permitted to store up to 396 drums in this unit. The unit measures about 22 feet by 65 feet (see Photographs No. 1 and 2).

Date of Startup:

This unit began operation in August 1982.

Date of Closure:

This unit is active. However, CIC will close the unit as soon as closure activities are approved by WDNR.

Wastes Managed:

This unit managed various wastes (D001, F001, F002, F004, F005, F017, K078, K086, and P100) collected from its customers. During the VSI, two drums of hazardous waste were stored in the unit. The CIC representative indicated that these drums would be disposed of when WDNR approves the impending closure.

Release Controls:

This unit is underlain by a concrete floor. Individual concrete slabs are keyed together, and no floor drains exist within the building. The unit is ventilated by an air duct that extends vertically along the eastern wall of the unit. The building that houses the unit is completely enclosed.

History of Documented

Releases:

No releases from this SWMU have been documented.

Observations:

The unit contained two, 55-gallon drums of hazardous waste during the VSI. PRC did not observe any cracks in the concrete floor, and the concrete slabs that make up the floor are keyed together. PRC did not observe any evidence of a release from this unit.

SWMU 2

Laboratory Waste Accumulation Area

Unit Description:

The laboratory waste accumulation area is located in the QC laboratory near the north end of the CIC facility. The unit consists of an unmarked area near the northwest corner of the laboratory. Waste solvents are stored in a sealed, 5-gallon pail on the laboratory floor until enough waste has accumulated to be disposed of off site (see Photograph No. 3).

Date of Startup:

This unit began operating when the Hazardous Waste Drum Storage Area (SWMU 1) began operations in August 1982.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages spent laboratory solvents, including spent halogenated and nonhalogenated solvents (D001, F002, F004, and F005).

Release Controls:

This unit is underlain by a concrete floor. No drains exist within the QC laboratory. Waste is stored in a sealed, 5-gallon pail.

History of Documented Releases:

No releases from this SWMU have been documented.

Observations:

The unit contained one, sealed, 5-gallon pail of spent solvent generated in the QC laboratory.

SWMU 3

Hazardous Waste Incinerator

Unit Description:

The Hazardous Waste Incinerator was located outdoors along the CIC facility's eastern wall. It was a Kelly Company Model 380B incinerator designed to burn hazardous waste at a rate of 13 to 17

gallons per hour and a temperature of 1,800°F. Waste would have been transferred from drums into a 110-gallon, on-board tank that was part of the incinerator. The system was to be operated 8 hours per day, 5 days per week, and 52 weeks per year. CIC was permitted to operate the Hazardous Waste Incinerator. However, due to cost concerns, CIC never operated it.

Date of Startup:

This unit was installed in 1982 or 1983. It was never operated.

Date of Closure:

Because the unit was never operated, closure was not required. It has been dismantled and removed from the facility.

Wastes Managed:

This unit was designed to incinerate various solvent wastes (D001, F003, F005, and K086).

Release Controls:

The unit was located on a concrete pad outside the facility. It had no emission control equipment because combustion of wastes was . expected to be complete.

History of Documented Releases:

No releases from this SWMU have been documented.

Observations:

The Hazardous Waste Incinerator was not on site during the VSI. The concrete pad on which the unit was installed was unstained, and PRC did not observe any evidence of a release from this unit.

4.0 AREAS OF CONCERN

PRC identified no AOCs at the CIC facility during the PA/VSI.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified three SWMUs and no AOCs at the CIC facility. Background information on the facility's location; operations; waste generation and management; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. Following are PRC's conclusions and recommendations for each SWMU. Table 4, located at the end of this section, summarizes the SWMUs at the CIC facility and recommended further actions.

SWMU 1

Hazardous Waste Drum Storage Area

Conclusions:

The Hazardous Waste Drum Storage Area is on the east side of the CIC facility. The room in which this unit is located is constructed of concrete floors with no cracks. Up to 396 sealed, 55-gallon, waste-containing drums transported from CIC's customers were segregated by waste type and stacked two-high on pallets in this unit. CIC is currently planning to close this unit and cease hazardous waste storage operations as soon as WDNR approves the unit's closure. During the VSI, two drums were stored in this unit. The potential for release from this unit to ground water, surface water, air, and on-site soils is low.

Recommendations:

PRC recommends that closure activities be continued as soon as they are approved by WDNR.

SWMU 2

Laboratory Waste Accumulation Area

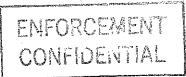
Conclusions:

This unit is in the northwest corner of the QC laboratory, in the north part of the facility. One sealed, 5-gallon pail of spent laboratory solvent is stored in this unit. The potential for release from this unit to ground water, surface water, air, and on-site soils is low.

Recommendations:

PRC recommends no further action.

RELEASED UNITIALS TWO



SWMU 3

Hazardous Waste Incinerator

Conclusions:

The Hazardous Waste Incinerator was designed to burn hazardous waste at a rate of 13 to 17 gallons per hour and a temperature of 1,800°F. Waste would have been fed into the incinerator from a 110-gallon, on-board tank that was part of the incinerator. The incinerator was permitted by WDNR, but was never operated. It has been dismantled and removed from the facility.

Recommendations:

PRC recommends no further action.

RELEASED 4 15 100 PRIN # INITIALS IAAV



TABLE 4 SWMU SUMMARY

	SWMU	_Dates of Operation_	Evidence of Release	Recommended Further Action
Amend	Hazardous Waste Drum Storage Area	1982 to Present	None	Continue closure activities in accordance with an approved closure plan
2.	Laboratory Waste Accumulation Area	1982 to Present	None	No further action
3.	Hazardous Waste Incinerator	Not Applicable ^a	None	No further action
No	ote:			r
a	The Hazardous v		er operated, and it has be	en dismantled and

RELEASED 4/15/62
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REFERENCES

- City of Milwaukee, 1992. List of Active Wells in Milwaukee, Department of Water Works, Open File, January 24.
- Commerce Industrial Chemicals Inc. (CIC), 1980a. Notification of Hazardous Waste Activity, U.S. Environmental Protection Agency (EPA) Form 8700-12, August 18.
- CIC, 1980b. RCRA Part A Permit Application, EPA Forms 3510-1 and 3510-3, November 14.
- CIC, 1982a. Letter from Harriet Pedersen to Jim Schmidt, WDNR, November 18.
- CIC, 1982b. Letter from Harriet Pedersen to Rick Karl, November 23.
- CIC, 1988a. Letter from Harriet Pedersen to Pamela Mylotta, WDNR, July 26.
- CIC, 1988b. Letter from Harriet Pedersen to Sue Rodenbeck, EPA, July 28.
- CIC, 1990. Letter from Fredric Michalski to Dolores Hayden, WDNR, November 9.
- CIC, 1991. Hazardous Waste Facility Operating License Renewal, WDNR Form 4430-6, September 23.
- Federal Emergency Management Agency (FEMA), 1985. Flood Insurance Rate Map, Community Panel No. 550278 0018C, Milwaukee, Wisconsin, November 15.
- Rand McNally Corporation (Rand McNally), 1992. United States Road Atlas, 68th Edition.
- Schaefer Brothers Building Company, 1985. Statement, Abandoned Gasoline Tank Closure for CIC, March 27.
- Southeast Wisconsin Regional Planning Commission (SEWRPC), 1989. Wisconsin Wetlands Inventory Map for Township 8 North, Range 21 East, Milwaukee County, Wisconsin, Base Map Created July 5, 1979, Revised February 27.
- U.S. Department of Agriculture (USDA), 1971. Soil Survey of Milwaukee and Waukesha Counties, Wisconsin, U.S. Government Printing Office, Washington, DC, July.
- U.S. Department of Commerce (USDC), 1961. Rainfall Frequency of the United States, Technical Paper No. 40, U.S. Government Printing Office, Washington, DC.
- U.S. Geological Survey (USGS), 1971. 7.5-Minute Topographic Map, Milwaukee, Wisconsin Quadrangle, 1958, Photorevised 1971.
- USGS, 1973. Water Resources of Wisconsin Lake Michigan Basin, Hydrologic Investigations Atlas HA-432.
- USGS, 1976. 7.5-Minute Topographic Map, Thiensville, Wisconsin Quadrangle, 1958, Photorevised 1971 and 1976.
- U.S. Environmental Protection Agency (EPA), 1981. Letter from Sandra Gardebring to Donald Michalski, CIC, July 30.
- U.S. EPA, 1982a. Letter from Karl Klepitsch to Donald Michalski, CIC, June 21.

U.S. EPA, 1982b. Letter from Karl Klepitsch to Donald Michalski, CIC, August 5.

U.S. EPA, 1987. RCRA Part B Permit for CIC, August 20.

U.S. EPA, 1988a. Letter from Glenn Sternard to Donald Michalski, CIC, July 15.

U.S. EPA, 1988b. Letter from James Brossman to Donald Michalski, CIC, November 2.

Wisconsin Department of Natural Resources (WDNR), 1981. Letter from Victor Pappas to Donald Michalski, CIC, April 16.

WDNR, 1982a. Environmental Assessment for CIC, Docket Number 1828, March.

WDNR, 1982b. Letter from Donald Theiler to Donald Michalski, CIC, May 18.

WDNR, 1983. General Facility Standards Inspection Form for CIC, January 27.

WDNR, 1985. General Facility Standards Inspection Form for CIC, August 14.

WDNR, 1986. General Facility Standards Inspection Form for CIC, May 14.

WDNR, 1988a. General Facility Standards Inspection Form for CIC, June 2.

WDNR, 1988b. Letter from Barbara Zellmer to Donald Michalski, CIC, June 3.

WDNR, 1988c. Letter from Pamela Mylotta to Donald Michalski, CIC, August 9.

WDNR, 1990a. Hazardous Waste Compliance Monitoring Enforcement (CME) Form for CIC, May 30.

WDNR, 1990b. Letter from Jeff Burger to Fredric Michalski, CIC, August 2.

WDNR, 1990c. General Facility Standards Inspection Form for CIC, September 11.

WDNR, 1991a. Hazardous Waste CME Form for CIC, April 2.

WDNR, 1991b. Letter from Colleen Hellenbrand to Harriet Pedersen, CIC, October 24.

Wisconsin Geological and Natural History Survey (WGNHS), 1992. Borelogs for Wells within 0.25 Mile of CIC Facility, Open File, Reviewed February 20.

ATTACHMENT A VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Commerce Industrial Chemicals Inc. 5611 Woolworth Avenue Milwaukee, Wisconsin 53218

WID 980 795 181

Date:

January 8, 1992

Facility Representatives:

Fredric Michalski, Commerce Industrial Chemicals, Inc. (CIC)

Inspection Team:

Ken Valder, PRC Environmental Management, Inc. (PRC)

Joe Dauchy, PRC

Photographer:

Ken Valder, PRC

Weather Conditions:

Overcast and raining, light easterly winds, temperature about 35°F

Summary of Activities:

PRC arrived on site at 9:05 a.m. to conduct the visual site inspection (VSI). The VSI team asked Mr. Michalski to clarify several issues. When this was completed, the VSI team

accompanied Mr. Michalski on a facility tour.

Mr. Michalski led the VSI team into the warehouse, the Hazardous Waste Drum Storage Area, the incinerator pad, and the quality

control (QC) laboratory.

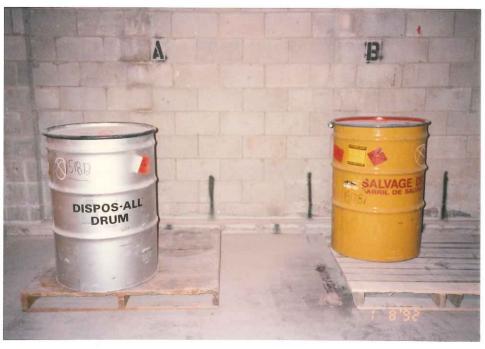
The tour was concluded and PRC left the facility at 10:00 a.m.

CST.

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Photograph No. 1 Location: SWMU 1 Orientation: East Date: 01/08/92 Description: This picture shows Bays A through E in the Hazardous Waste Drum Storage Area. Bay F is not shown in this picture.



Location: SWMU 1 Photograph No. 2 Orientation: East Date: 01/08/92

Description: This picture shows two drums of hazardous waste that remain in the Hazardous Waste Drum Storage Area at the facility.



Photograph No. 3

Orientation: South

Description: This picture shows the Laboratory Waste Accumulation Area in the QC laboratory. The bucket with the blue lid is accumulating waste.



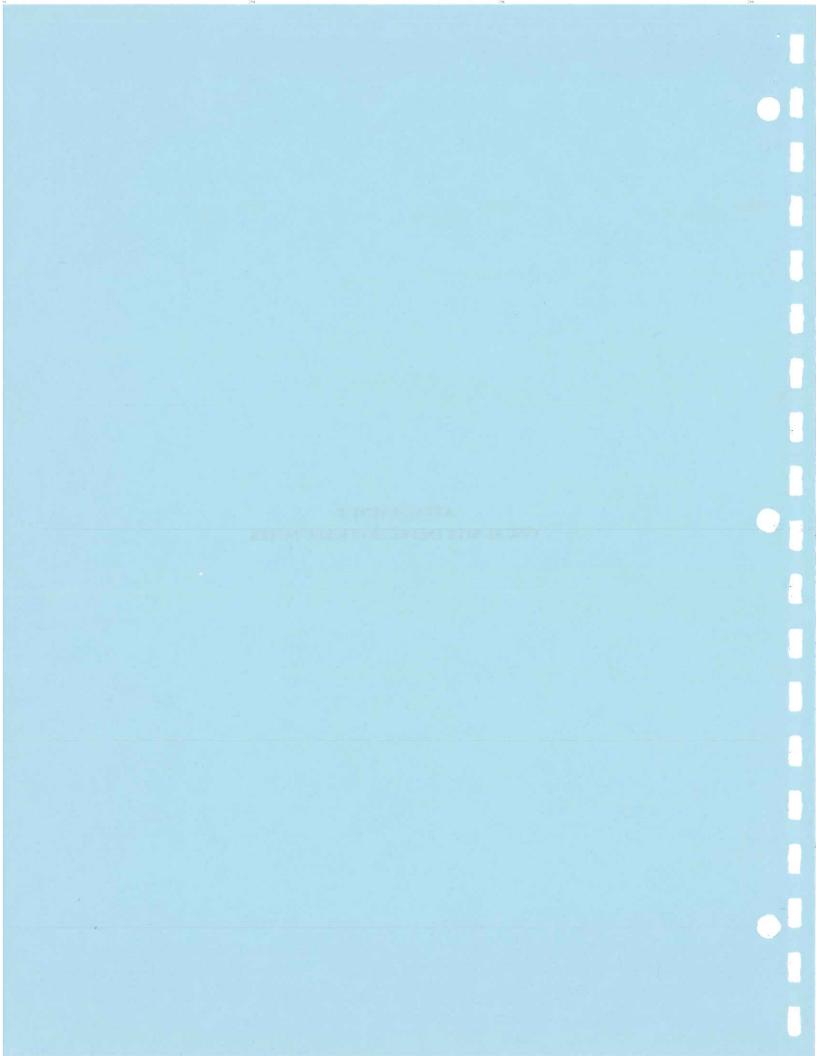
Photograph No. 4

Orientation: South

Description: This picture shows the area of the facility in which a gasoline underground storage tank (UST) was closed in place. No releases from the UST were documented when the tank was

filled with inert material in 1985.

ATTACHMENT B
VISUAL SITE INSPECTION FIELD NOTES



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY SEP 0.8 1995 REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

5HR-12

December 20, 1991

Fred Michalski, Vice President Commerce Industrial Chemicals 5611 West Woolworth Avenue Milwaukee, Wisconsin 53218

Re:

Visual Site Inspection
Commerce Industrial Chemicals
Milwaukee, Wisconsin
WID 980 795 181

Dear Mr. Michalski:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for 9:00 AM on January 8, 1992. The inspection team will consist of Ken Valder and Joe Dauchy of PRC Environmental Management, Inc., a contractor for the U.S. EPA. Representatives of the Wisconsin Department of Natural Resources (WDNR) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,

Kennely a. Ogle for Kevin M. Pierard, Chief OH/MN Technical Enforcement Section

Enclosure

Mark Gordon, WDNR cc:

ATTACHMENT I

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows.

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.



CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITSE & FOR WELL

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NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII Of 40 CFR Part 261.

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3.	For the units noted in Number 1 above and <u>also</u> those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the part or still be occurring.								
	Please provide the following information								
	 a. Date of release b. Type of waste released c. Quantity or volume of waste released d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.) 								
	We have had no releases to the environment.								
	Note: We have, through regular inspection, discovered drums								
	within our container storage area, which developed "pinhole type"								
	leaks. These drums have been placed into approved over pack								
	drums.								
4.	In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.								
	None								
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))								
	Donald J. Michalski President Typed Name and Title								
	3-12-85								

Signature

Date

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